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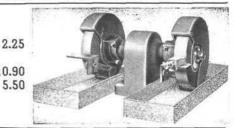
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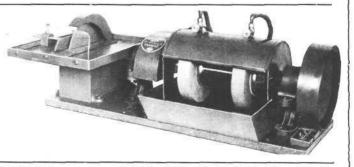
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DESERT CALENDAR

Dec. 1-31 — Special Exhibit, Indian paintings and drawings by Clarence Ellsworth. Southwest Museum, Highland Park, Los Angeles, Calif.

Dec. 2 — San Antonio Day at La Loma, near Taos, N.M. Firelight procession.

Dec. 6—Hike up Murray Canyon, in Palm Canyon. Desert Museum, Palm Springs, Calif.

Dec. 6 — International Children's Christmas Parade. Calexico, Calif. Dec. 11-12—Saint's Day Pilgrimage and Fiesta. Tegua Indians. Las

and Fiesta. Tegua Indians, Las Cruces, N.M. Dec. 12—Feast Day of Nuestra Senora de Guadalupe. Taos and Santa Fe, N.M.

Dec. 13 — Hike up Eagle Canyon, near Cathedral City. Desert Museum, Palm Springs, Calif.

Dec. 13-14 — Southern California Chapter, Sierra Club, knapsack trip to Long Valley, in San Jacinto Mts., Calif.

Dec. 14—Desert Sun Rancher's Rodeo, Slash Bar K Ranch, Wickenburg, Ariz.

Dec. 14—Bandollero Tour to Borrego Springs, Calif., from Yuma, Ariz.

Dec. 16-24—Nightly pageant-processions (*Posadas*) depicting search for lodgings by Mary and Joseph in Jerusalem. Mesilla, N.M.

Dec. 18-20—Annual Turkey Show, St. George, Utah.

Dec. 18-31 — Illuminated "City of Bethlehem" Christmas panorama in Climax Canyon, near Raton, N.M.

Dec. 20—Palm Springs Desert Museum field trip to Magnesia Canyon, near Rancho Mirage, Calif.

Dec 23 — Historical pilgrimage to Coyote Canyon, Borrego Valley, Calif. Services commemorating birth of Ignacio Linares on Christmas Eve, 1775, the first white child born in California.

 Dec. 24 — Night Procession of the Virgin, with cedar torches and pine bonfires. Taos Pueblo, N.M.
 Dec. 24 — Ceremonial Dances after

 Dec. 24 — Ceremonial Dances after Midnight Mass in mission churches, San Felipe, Laguna and Isleta Pueblos, N.M.
 Dec. 24—Christmas Eve in Spanish

Dec. 24—Christmas Eve in Spanish villages in New Mexico. Little bonfires for El Santo Nino, The Christ Child, lighted before houses and in streets; Candle-lit Nacimientos (Nativity scenes).

Dec. 25—Deer Dance or Los Matachines, Taos Pueblo, N.M.

Dec. 26 — Turtle Dance, San Juan Pueblo, N.M.

Dec. 27—Palm Springs Desert Museum field trip to Oswit Canyon, Calif.

Dec. 28—Desert Sun Rancher's Rodeo, Remuda Ranch, Wickenburg, Ariz.

Dec. 31—Deer Dance, Sandia Pueblo, N.M.

Jan. 1-4—San Diego Chapter and Desert Peaks Section, Southern California Chapter of Sierra Club trip to Mitchell's Caverns, Providencia Mts., Devil's Playground, Calico Mts., Calif.



Volume 15	DECEMBER, 1952	Nu	mb	er	12
COVER	In Navajoland, by Rex Fleming of Santa Barbara, California				
CALENDAR	December events on the desert				3
FIELD TRIP	We Explored an Old Nevada Lake Be By HAROLD WEIGHT				4
LOST MINE	Troopers' Lost Gold By KENNETH E. HICKOK				9
CONTEST	Prizes for camera pictures				10
POETRY	On That First Holy Night, and other po	ems			11
GHOST TOWN	I Remember Bodie By E. LOUISE SARTOR	٠			12
CLOSE-UPS	About those who write for Desert				14
ART	He Paints Pictures, Too By JOHN W. HILTON				16
TALL TALES	Howard Clark Champion Liar	. 15	*		18
EXPERIENCE	Life on the Desert By EDNA PRICE				19
FICTION	Hard Rock Shorty of Death Valley By JAMES D. KIRKPATRICK				20
LETTERS	Comment from Desert's readers				21
CHRISTMAS	Christmas Eve in San Felipe By DOROTHY PILLSBURY				22
TRUE OR FALSE	A test of your desert knowledge			,	24
NEWS	From Here and There on the desert				25
MINING	Current news of desert mines				31
LAPIDARY	Amateur Gem Cutter, by LELANDE QU	JICK			32
HOBBY	Gems and Minerals				33
INDEX	Contents of Desert for 1952				38
COMMENT	Just Between You and Me, by the Edit	or.			42
BOOKS	Reviews of Southwestern literature.				43
PHOTOGRAPHY	Pictures of the Month	. Ba	ck	CC	vei

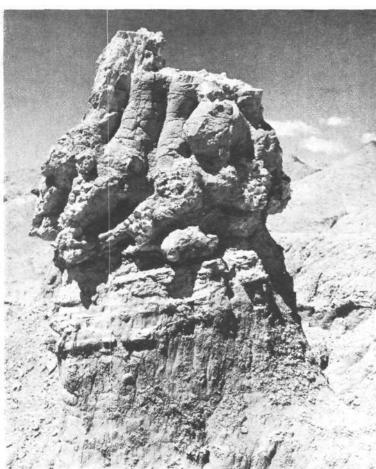
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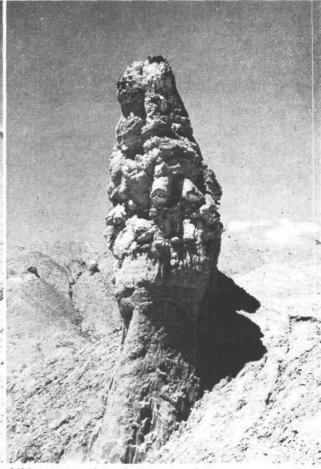
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The petrified stumps are almost like museum exhibits, mounted on their own pedestals. Even portions of the roots remain. Fortunately, the wood in these stranged attractions of the Sump Hole was not petrified in a form of interest to rockhounds as specimens, and the stumps have survived many a rock hunt. Disintegrated wood from the stumps and trunks may be picked up on the ground below the stumps if specimens are desired.

We Explored an Old Nevada Lake Bed

By HAROLD WEIGHT Photographs by the Author Map by Norton Allen

HE FIRST time I saw photographs of the strange petrified stumps of Fish Lake Valley, Nevada, in 1928, I was determined that some day I would visit the originals. Not that I was especially interested in rocks then—in fact, the pioneer rockhounds of those days were looked upon as rather queer characters—but the oddity of those stumps perched on their claystone pedestals fascinated me.

It wasn't until 1945 that I finally did make my first trip into that strange corner of Fish Lake Valley which the inhabitants of surrounding areas have labeled the Sump Hole. Fortunately

the stumps on their clay pedestals were still to be seen. I think that "fortunately" is the proper word, for in the intervening years, with the growth of the rockhound hobby, a number of large scale and professional collectors had combed the area for petrified wood. I'm afraid that if those stumps had been of cutting grade—or even good specimen material—no trace of them would remain today. But since their rockhound interest is as negligible as their geological interest is great, they have been spared except by wind, rain, heat and cold.

I will never forget that first visit. I must admit that its purpose was as

In the Sump Hole of Fish Lake Valley in Southwestern Nevada, petrified tree stumps perch on fantastically eroded pedestals to form a weird natural museum. Overlying masses of hard rock protect the softer materials within from weathering. Fortunately. Nature also has protected the unique pillars from vandalism for, although the area around abounds in smaller examples of highly - colored opalized wood, the stumps themselves offer collectors poor specimens as well as difficult removal problems. Visitors today to this beautiful arroyo-etched bowl will find these columns undisturbed, standing as textbook illustrations of Nevada's geologic past.

much to see what was available in collecting material as it was to see the stumps. I was following directions given by a friend, and it was long after dark when I traveled Nevada Highway 3A through the open pass and started down toward Fish Lake

Valley. About a mile southwest of the summit, I turned left on a rutted trail—and in a matter of a few hundred yards was thoroughly stuck in the sand where the trail crossed a shallow arroyo.

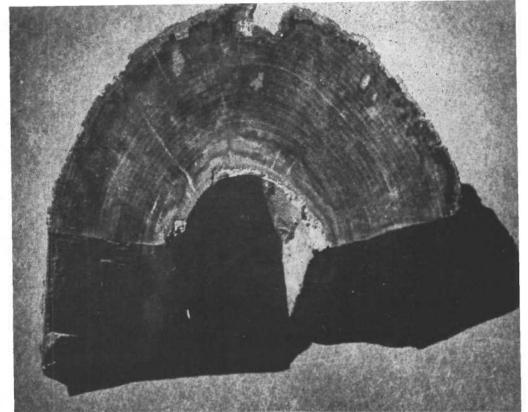
A chilling wind was whistling through the desert night, and by the time I had worked the low, heavy car up the far bank and onto slightly firmer terrain, I was cold, tired and covered with sandy dust. And I soon found that the entire slope up which I was trying to drive was composed of sand. Since I didn't know the trail I was following, couldn't see far, and was therefore unable to attempt any speed, I progressed by spins and spurts. Finally, less than a mile from the highway, I gave up, unrolled my sleeping bag and turned in for the night.

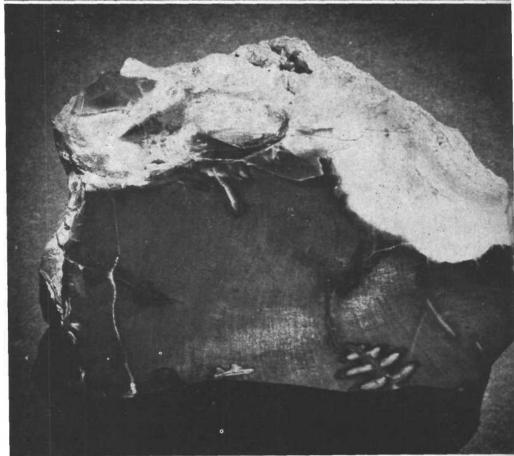
It was just as well that I did. With the first morning light I hiked on up the tracks, filled with blown sand and patterned with rodent and reptile tracks. After I had gone a few hundred yards, quite suddenly and with little warning the trail twisted to a stop yards from the edge of nothing. I looked out across a great U-shaped pocket in the hills, hundreds of feet deep in places, with walls of fantastically eroded sedimentaries.

The Sump Hole is a beautiful piece of erosion in its own right, deserving of a more elegant name, and the unexpectedness with which most visitors first come upon it adds to its spectacular effect. It's like a small, greytoned Bryce, a Red Rock Canyon without the red, hidden among uninteresting-appearing sand hills and ridges. I've gone back a number of times to the Sump Hole. Each time I am impressed anew by the completeness with which Nature has concealed this page of Nevada's past from the casual passerby.

A mountain screens it from the north, rolling hills from the west, a high ridge from the east and the twisting channel of its own drainage arroyo from the south. And though Highway 3A skirts it for several miles on the west, at places within a few thousand feet of the bowl the passing motorist has no suspicion of its existence.

I don't know who first discovered the Sump Hole, or who first found the prizes it contains. Some prospector, probably, in both cases. But a very respectable type of rockhound—fossil hunters from the California universities—did the first real exploring and collecting there. Their prime interest was in the fossil bones which they recovered from the clays and tuffs and water-laid ash, and in the story of the pre-human history of the West which those bones helped decipher. In 1926, 1929, 1930, Chester





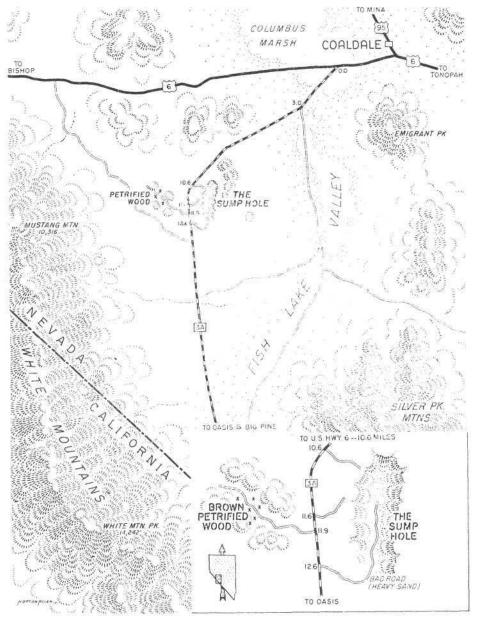
Above—Typical piece of the brown driftwood from the hills west of the Sump Hole. Much of it, including this piece, is good enough grade to be polishable.

Below—Some of the most beautiful petrified wood to be found in the west has been collected in the Sump Hole area, although high grade pieces now are scarce. This specimen is red-brown, red and white opalized wood from the brink of the hole.

Stock, R. A. Stirton and E. R. Hall were publishing papers through the University of California Press, telling about primitive horses, various hoofed

mammals and rodents whose fossils they had found.

From their work and that of various geologists, including especially H. W.



Turner, who studied the Esmeralda formation for the U.S. Geological Survey, some idea of a vastly different time in Nevada can be conjectured. Not so long ago—as the professors figure time—Lake Esmeralda gemmed what is now sagebrush desert, lava strewn wastes and chemical-saturated playas. The blue waters rolled over all this part of present Nevada, from the White Mountains east at least to the Montezumas, and to the north an undetermined distance. Vegetation was abundant along its shores: ferns, figs, oaks, willows, sumacs and soapberry were identified by Turner, and tree trunks up to eight feet in diameter have been found. Close beside it lived many animals of the period, among them ancestors of the horse, the camel. the antelope, the rhinoceros. Nor were the lake waters barren. Many fossil fish, some of quite large size, have been found.

Lake Esmeralda probably was at its best during the Miocene—or "mod-

erately recent"—period of the Tertiary. Many geologists are more cautious about calibrating these periods to year scales than they once were. However, geophysicists, measuring the rate of disintegration of radioactive materials, recently put a possible date of 17 million years ago to the Miocene. Of course, even that is 'way back for those who still look upon a million—in years or dollars—as a large figure.

At any rate, it was long enough ago for Nature to bury or crode the greater part of that chapter in her autobiography. For, while we leave our ruins and ghost towns glaringly exposed. Nature, with more time and resources, hides or disintegrates her ghost lands. But once having hidden it, like a prospector with a big strike, it would seem she cannot refrain from exposing a bit for our admiration. So, in the northwestern corner of Fish Lake Valley, erosion has placed on exhibition a vignette from the story of Lake Esmeralda.

On my first visit, I camped alone four days beside the Sump Hole and covered the area pretty thoroughly on foot. It was on the second day that I came upon the fossilized tree stumps, in the marl hillocks on the west side of the bowl, and to me they still are the most interesting features of an interesting region. Apparently the trees of which they are the remnants were buried or submerged just as they stood. The replacement of the wood in these stumps—a sort of clay-rock which can scarcely be identified as wood-indicates that they were buried at a different time and under different conditions than the beautifully opalized and agatized pieces and limbs which are found in other layers of the lake sediments.

Quite possibly, they tell of some day of judgment at the end of the lake's history, and of the close of the Tertiary, when tremendous volcanic action took place around Lake Esmeralda. They may have been buried in hot mud or ash, or they may have sunk beneath the water as the earth's surface twisted and shifted. Now, at any rate, they have emerged again, their roots still coated with a sandstone, and the harder material of which they are made has prevented the erosion of the underlying clay, resulting in the odd pedestal-mounted exhibit effect.

During my hunting through and over the Esmeralda formations, I found many things to interest the rockhound. In the main cliffs bits of fossil bone-looking like the original but silica-replaced - can be found occasionally. In the drainage channels of the clay hills I discovered a number of chunks of very pretty semi-opalized wood in various shades of brown, showing every cell of the original. On the floor of the Sump Hole, in various places, were paper-thin seams and sheets of chalcedony, sufficiently colored in most places to be called sard. Also on the bowl floor, toward the south, were pieces of opalized wood. thin pipes of it, coated with greenish sandstone. From appearances they must have been rootlets. While too soft to cut, they make interesting specimens.

My best find on that first trip was made only a few feet from the point where I camped, and right on the brink of the Sump Hole. Here it was obvious that a large section of a tree trunk had been hauled away. Little remained on the surface, excepting a few pieces of silicified bark and branches, but I prospected down the tiny wash in which the trunk had been buried and dug up several beautiful pieces of brown, white and reddish onal wood and one piece of fine cutting grade with a purplish tinge.

The whole area of the Sump Hole

is worthy of exploration by collectors. I have many areas there which I expect to investigate in the future. But for rockhounds who wish to be certain of obtaining specimens, I can recommend the low, lava-spotted hills which lie across Highway 3A and two and three miles west of the Sump Hole. A passable auto-trail penetrates the area, and Lucile, Eva Wilson and I explored it on our most recent trip to Fish Lake Valley.

There is a good deal of petrified wood to be collected in these hills, and it can be found in many shades of brown to white. Most of it shows perfect replacement of the original structure and is of cutting and polishing quality. Some is freakish indeed, consisting of hundreds of tiny slivers, the wood—although replaced with rock—

having gone to pieces just as dried desert wood does. Some is almost turquoise green in color, but of a chalky replacement which probably would not polish. And, near the end of the trail, I did find one piece of finely opalized wood which I was unable to trace to its source.

The prize find of all our visits was made by Lucile in the Sump Hole itself, but it is unlikely that the rest of us rockhounds can match her luck. It was a perfect large arrow or spear head flaked from dark transparent obsidian, and it proved that our desert predecessors knew that strange corner of Fish Lake Valley long before the white man came. I would certainly like to know what story they built up about the fossil tree stumps.

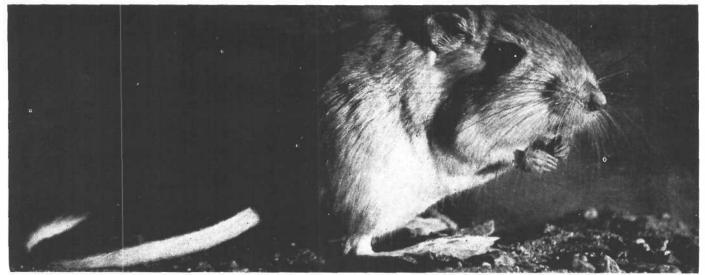
Probably they came to the valley

to hunt. While I was camped there, I saw numbers of the rat family, quantities of lizards and several jack rabbits. And while the present mammal life is not as numerous or its individuals as large, its fighting spirit certainly has not lessened—as I discovered. In those days, when my expeditions were more leisurely, I carried a live trap with me. That is a device in which the animal to be trapped enters a sort of wire-mesh tunnel and, when he takes the bait, drops panels closing off either end of the tunnel. Thus he can be captured without injury.

jury.
When I caught something interesting or new, I would place it in a little glass-walled "studio" and photograph it before turning it loose. In the sand hills above the Sump Hole I captured

The Sump Hole is a small Bryce Canyon in grey. Its beds of clay, sandstone, tuff and breccia are part of the bed of Lake Esmeralda, which covered this portion of Nevada millions of years ago.





The "Tough Guy," aggressive kangaroo rat from the edge of the Sump Hole. He bit the hand that fed him—but then, he hadn't asked to be fed, or photographed either.

an especially fine kangaroo rat. I used a heavy glove to transfer Mr. Kangaroo to the glass cage, and there he posed quite willingly, eating contentedly at a piece of the bait—peanut butter, raisins and bacon fat.

He posed so willingly that, when it came time to take him out to turn him loose, I didn't bother to put the glove back on. I should have been warned by the aggressive manner in which he thumped the ground with his hind foot. But I picked him up gently and started to carry him to the mouth of his burrow. Then, most dexterously, he twisted about and sank his big front teeth into my thumb. Then and there I ceased being a taxi service. I put my hand on the ground and opened it wide. Did Mr. Kangaroo leave when free? Not until he gathered his muscles and gave me one last "Take that!" bite. Then he zoomed off my hand, located himself almost in mid air, turned and dove into his hole. I still have the scar-and the education.

But that is my only unpleasant memory of the Sump Hole. It is a striking spot, an excellent place to camp and rock hunt even in mid-summer. Its altitude—between 5000 and 6000 feet—assures pleasant temperatures in the summer, although midday can become quite hot. It is not recommended for winter rockhunting after the snow falls.

There is no good road right into the Sump Hole or even right to its edge. The one up the wash into the center of the bowl almost always is passable to four-wheel-drives, but regular stock cars should check the soft spot where the road enters the wash before trying it. It might be best to turn in on the road which leaves 3A

SUMP HOLE LOG

00.0 Junction of Nevada Highway 3A with U. S. Highway 6, 28.1 miles east of the Nevada State line, 6.1 miles west of the junction of U. S. Highways 6 and 95. Turn south on paved Nevada 3A. Keep on paying.

10.6 Sandy track, left, climbs to edge of Sump Hole.

11.6 Reverse Y, left, leads to easy walking distance of Sump Hole. This is the best road.

11.9 Poorly defined road, right, leads into hills west of highway, and to petrified wood collecting area.

Rough, but passable.

12.6 Sandy auto trail, left, which enters the drainage channel of the Sump Hole. If road is packed, it is possible to drive up wash into Sump Hole. Drivers of regular passenger cars should check road condition carefully before attempting.

at 11.6 miles from Highway 6A, then hike east over the hump. The Sump

Hole should be viewed from spots along its rim as well as from its floor.

To me, coming upon the eroded walls of this bowl unexpectedly in the heart of seemingly featureless hills was an emotional experience. We look upon the great features of our land-scape—the hills, valleys, mountains—as permanent parts of the world's scenery. Compared to our life scale they are. They are little changed since the first Indian nomads wandered into the Western deserts.

But in the ceaseless, measureless passage from molten ball to frozen world, the eternal hills to which we lift our eyes are no more than the cards in a deck, briefly arched for shuffling, then shuffled again, dealt out, or cast aside. In this corner of Fish Lake Valley, we can look upon a deck, fortuitously exposed, that Nature tossed away millions of years ago.

Zoo Gains Rare Mexican Rattlers

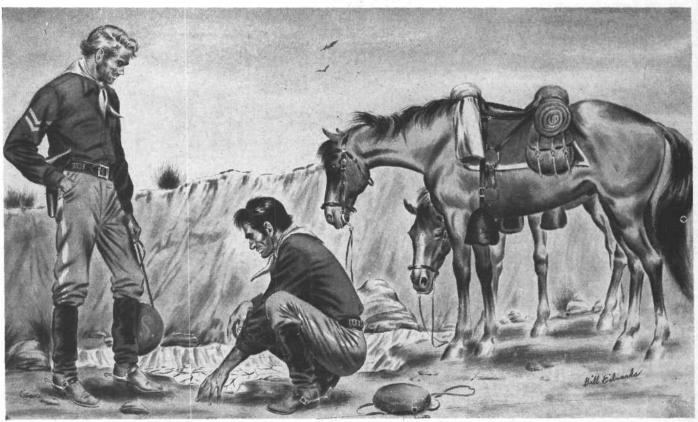
On the waterless, uninhabited Mexican Isla Tortuga, 25 miles northeast of Santa Rosalia, halfway down Baja California's gulf coast, Lewis Wayne Walker captured a pair of rare rattlesnakes. He packed them in strong boxes and sent them to Dr. William M. Mann, director of the Smithsonian Institution's National Zoological Park in Washington, D. C.

Dr. Mann received the rattlers in good condition, jubilantly identified them scientifically as *Crotalus tortugensis* and installed them in his reptile house. Although he is one of the world's foremost authorities on wild creatures, Dr. Mann had never before seen similar rattlers. An unprepossessing dusty gray in color, they are not

very active. The larger snake is almost two feet long and has eight buttons in his tiny rattle. The eyes of both are set in peculiar bulging sockets. Their species was first described in 1921.

Walker, a young ex-Marine, was assisted by the National Geographic society on his mission, which took several years to complete. He suffered a shipwreck, an automobile accident and considerable hardships during the search period.

The zoo's new snakes are one of nearly 30 varieties of rattlesnakes. All are members of the poisonous pit viper family. Ranging from Southern Canada to Uruguay, they are found only in the Americas.



The gods that had smiled so benevolently, now frowned. The waterholes were dry.

Troopers' Lost Gold

By KENNETH E. HICKOK Illustration by Bill Edwards

T WAS in the early 1870s when a weary ox-team halted at Maricopa Well and a tired teamster released the beasts from their yoke. Meanwhile, the emigrant's family tumbled from the wagon to prepare the evening meal, thankful that this was not another dry camp.

The mother and eldest daughter prepared the meal while the two younger children helped the father make camp and gather firewood. Recently the warlike Apaches had been confined to a reservation and it was no longer considered hazardous for cross country caravans to build night campfires.

The travelers did not know that a few days previously a band of Indians had escaped from the reservation, and had headed toward the Mexican border. Military scouts, on their trail, reported that the band had swung wide around the new settlement of Phoenix, and were headed southwest, toward the famous old Indian watering place, on the bank of Gila River, known as Maricopa Well.

Next morning, when the trailing scouts reached the well, they found the looted wagon still smoldering, the man, his wife and the two small children slain, but no sign of the elder daughter, which indicated that she was held captive. The Indian trail crossed the river and turned south, straight for the border. Apparently, the incident at the well was only a minor diversion for the savages, who were headed for Mexican lands, where U. S. troopers could not touch them.

One scout remained close on the trail of the renegades, while the other carried the news of the massacre to Fort Tucson. The commanding officer of the fort ordered a company of mounted troopers, in command of a captain, to intercept the raiders before they reached safety in Mexico, and bring them and their captive back to Tucson.

The captain led his troop, at forced draft, southwest from the fort. They would ride an hour and rest ten minutes. The fast pace, in the broiling heat, soon told on men and horses alike. The water holes were uncertain in this part of the desert. The captain instructed the troopers to note carefully the actions of their thirsty horses.

Cavalrymen of the U.S. Army found a rich gold ledge in southern Arizona nearly 80 years ago—and then lost it again. Many persons have sought for this fabulous deposit, but as far as is known, its location remains a secret to this day.

If any animal acted as though it scented water, they would investigate.

Suddenly, the lead horse threw up its head, sniffed the breeze and whirled off at a tangent, to be followed by the rest of the animals in the company. Into a shallow arroyo galloped the horses, where a pool of rain water had been caught in a depression, at the foot of a low, rocky ledge that ran along the wash for several hundred yards.

The first served withdrew up the wash to make room for the others. Another pool, similar to the first, was found at the upper end of the ledge. Now, there was ample water for all. Parched throats were soothed, canteens filled, and the thirsty horses were led up to drink their fill.

One observing trooper, gazing into the pool while watering his horse, thought to himself: "Those shiny pebbles in the pool sure look pretty." Idly, he scooped up a handful of the bright stones and his shout brought troopers from all directions. The soldier displayed a handful of gold nuggets to his amazed companions.

Each man scrambled for a share of

the gold. The nuggets soon gave out in the upper hole so some of the troopers returned to the lower one. Many more of the glittering nuggets were clawed from the mud that marked the site of the first water. Some of the men searched along the rocky ledge, in the wash, and excited gasps were heard on all sides as prize nuggets were found.

Some of the troopers wanted to abandon the pursuit of the Apaches and start mining this bonanza.

The captain was adamant in his refusal to listen to such pleas. Further, he collected all the nuggets and distributed them, so that every man had two or three of the shining gold pebbles. Immediately after the distribution of the nuggets, the order was given and the troop rode away. Such hills as were visible had no distinguishing peaks or other marks and the nearby desert was unrelieved sand, greasewood, palo verde and cactus.

Not long afterward, the trail of the Apaches was cut. Soon the captain and the scouts had planned their strategy. The band of marauders was surrounded and captured. The Indians were taken back to Tucson to await their trial and the white girl was returned to relatives in the east.

The returned troopers were in a frenzy of gold fever. Many of them offered their resignations from the army but as their enlistments did not expire for periods of from one to three years, they had to remain on duty.

The troopers were well aware that shifting desert sands would soon obliterate the trail to the fabulous ledge. Time was of the essence. To wait a year, to the end of their enlistment, was too long, when one desert downpour or a sandstorm might forever erase the trail to the nugget laden outcrop. Two of the troopers deserted, stole horses, food and water, mounted and galloped over their old trail to the shining pebbles.

The trail was still plain and they reached the outcrop in good condition, but thirsty. The gods that had smiled so benevolently, now frowned. The water holes were dry.

Paying scant heed to thirst, they loaded each horse with as much gold as it could carry, mounted and began the ride back. Soon, it became evident that the horses were loaded far beyond their capacity, so the grub was flung away. Next went the oats and nosebags, then the pistols and ammunition.

The parched, swollen tongues of the men did not permit conversation but the staggering gait of the horses was more eloquent than speech. Finally the men dismounted and led the

horses, still refusing to part with the golden cargo.

The men, as well as the horses now staggered on the trail. Handful after handful of nuggets was thrown into the brush, as men and horses staggered on. Finally one man went down, was unable to rise. His partner, with a superhuman effort, got the body on the horse's back and steadied it as he staggered along.

That is how they found them. One dead, the other dying. Twice, they had gazed upon the golden ledge. Both had paid the supreme price for the second look.

The remainder of the troopers looked upon the bodies of their two dead comrades and gave silent thanks that they had not deserted and gone along on the ill-fated expedition.

Phoenix was a town without paving or sidewalks, when this story was told to a contractor, by an old man he had hired as a carpenter's helper. The story came out a bit at a time, over several years, while he worked at the trade. Little notice was paid then to a story of a mine on the desert. It seemed that every other man on the street knew of a mine. Prospectors were considered a little loco.

However, the old man was different. He worked steadily and well, saved his money and quietly went about his work. Each spring he would take several weeks off and go looking for the lost ledge. The only time he talked much was just before he would start on his yearly search.

The contractor last saw the old man in the spring of 1915, when he quit work to go on his annual trek. On this occasion, the old man pulled two gold nuggets from his pocket and said, "I was a trooper in that company sent after the Apaches, when we found the gold." Without more palaver, the old man donned his hat, and was gone.

Certainly, many men have searched for the lost ledge. Without a doubt, every one of the troopers present when the gold was found has had a try for it. How many more? Your guess is as good as mine. It is reasonable to suppose, however, that the outcrop has never been found, because a rich strike like that could not be kept secret for long.

Tracing the possible routes of the troopers might place the lost gold in the Quijotoa or Baboquivari Mountains. Both locations have been the scene of small strikes of rich gold ore, so either range would fit the description. But just where is the ledge? *Quien sabe!*

Prizes for Pictures.. in December

Every month the staff of Desert Magazine selects the two best photographs currently submitted, as winners in the Picture-of-the-Month contest, and awards cash prizes to the photographers. This contest is open to all Desert readers and any subject is suitable provided it is essentially of the desert country.

Entries for the December contest must be in the Desert Magazine office, Palm Desert, California, by December 20, and the winning prints will appear in the February issue. Pictures which arrive too late for one contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.

 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.

 6—Time and place of photograph are immaterial, except that it must be from the
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA

DESERT DAWNING

By BEL BALDWIN Blythe, California

My heart was a desert, And dust were my dreams, And empty and dry Were life's numerous streams.

When dawn, and a sunrise, And the place where I trod Became hallowed with promise As I stood there with God.

Now my desert is blooming Life's streams overflow And I know Love walks with me Wherever I go.

DESERT PRIESTESS

By Bessie Berg Rio Linda, California

She veils in purple shadows mysteries Known to the desert night And distant moon, Or to the silent slipping lizard where, Poised under sheltering rock,

He outwaits noon.

Hers is the strength of stillness and of Time,
Where words are strangely trite,
And trail away

Into the spaces, baffled and abashed, Before the ancient sentinels That wait, or pray!

A BLANKET AND A FIRE

By Gaston Burridge Downey, California A blanket and a dancing fire Upon the desert's breast Will push your troubles far away, Will give you silent rest.

A blanket and a dancing fire Of pinyon limb and cone Will spin a loop of fantasy Whenever you're alone.

A blanket and a dancing fire Beside a moon-split lake Can weld a peace around your life That none but death can break.

A blanket and a dancing fire These two are always friends Which warm the cockles of your heart When other dreaming ends.

WONDERLAND

By Mrs. Robie Clever Watsonville, California

Mother Nature wields her brush With such a carefree hand And brilliant colors she creates The Desert—Wonderland!

DESERT VASTNESS

By Blanche Houston Gray Garden Grove, California

Have you dwelt on the desert at sunset, And sat in the silence there Till you felt the breath of creation, Borne in on the desert air?

Did you follow the long, rough pathway The foot of man has trod Since he started with fear and trembling, Fresh from the hand of God?

If so, you have had the setting, Away from the tumult and strife, To ponder the vaster questions That lead to a greater life.



On that First Holy Might

By Mary Perdew Santa Ana, California

At Christmas on the desert
The sands are turned to snow
Beneath the brilliant moonlight
That floods the world below.

At Christmas on the desert
The skies are filled with light;
It's easy to remember an
Angel choir at night.

At Christmas on the desert Way out where turmoils cease, It's easy to remember that Blessed song of peace.

It's easy to remember
Three Wise Men riding far,
Their camels striding swiftly
Toward a guiding star.

At Christmas on the desert The star is wondrous bright; It brings to us the glory Of that first holy night.

A FOOL

By Reeve Spencer Kelley Albuquerque, New Mexico

A fool walked on the desert sands And careless swung his tender hands, Swept past a lizard, brilliant green, Cried, "where is beauty to be seen?" Past thistle, "hojase," monkey flower, He thrashed away a futile hour; Twice tore his flesh, went sick with heat, And left the desert in defeat. A fool who thought it Nature's duty To make display of all her beauty.

Strive!

By TANYA SOUTH

Strive, then, and work!
Nor ask for easy gaining.
Life's not to shirk,
But to be up, attaining!

Who wants an easy life, Stagnant and dead? Through struggle, grief and strife We forge ahead!

SAND MEDITATIONS

By DENNIS R. DEAN Inglewood, California

Once a crystal, perfect and fine, Once with beauty in each line, Once a spire, great in height, Once a prism, rich in light.

Now, a lowly grain of sand, Swept into dunes by unseen hand, Whisked along by magic wand, Yours is the life of a vagabond.

YUCCA

By ALICE TENNESON HAWKINS San Pedro, California

Young Summer danced across Southwestern sands

sands
And placed two faring strangers in her debt.
One was a horseman riding with a sword.
The other walked with prayer beads in his hands.

The soldier saw the Spanish Bayonet, The friar, waxen Candles of Our Lord!

CONQUEST

By MARGARET HORMELL North Palm Springs, California

Do you love games that prove your worth? Then plant in desert soil; here's how: First measure off your plot of earth— For sturdy posts and fence allow—

Then hollow out the sand, two feet, And salvage rocks, both large and small, For building fancied things concrete: Fish pond, incinerator, wall—

Use mountain dirt alloyed with sand To fill the pit; manure—not thick—And water, for a thirsty land, More love than sweat will work the trick!

When shoots appear you've but half won; Windbreaks of lumber, stone, or mortar, A partial shelter from the sun, And after them more water, water!

ACCEPT THE DESERT'S MOODS

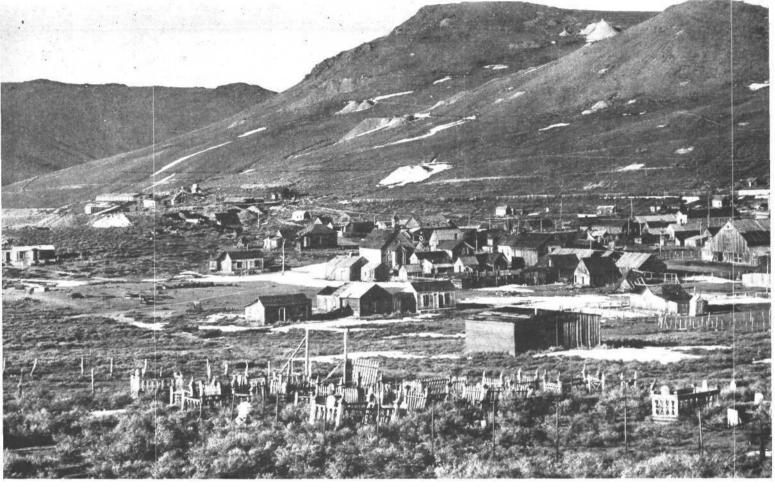
By Amy Viau Santa Ana, California

It seems quite credible to me
That he who frets at a desert mood
Must miss the desert's witchery
By not accepting its bad and good.
For the bad and good of the desert blend
In a lure that beckons receptive hearts
To come to the desert as to a friend
And garner from all that it imparts.
For he who frets at a desert mood
Is none of the desert's, but alien blood.

TWILIGHT ON THE MESA

By Mary Perdew Santa Ana, California

When its twilight on the mesa, Far, far out, where all is still; Save the distant river rolling. Or a night hawk, lonely, shrill. Then a healing peace come drifting. Lingers softly, gently there, Wiping out small nagging worries, Soothing sadness, pain or care. In the valley, bright lights twinkle, As the village darkness creeps, While the twilight slowly deepens And the quiet mesa sleeps.



1 Remember Bodie . . .

By E. LOUISE SARTOR

OR MANY years in the back of my mind I had nursed the wish that I might some day see again the place of my birth—Bodie, California. Not until I was a gray-haired woman was this wish granted me. By then the buildings that remained were empty ghosts and could no longer tell the story of the full and exciting life Bodie had known since William S. Body first discovered gold there in 1859.

Mr. Body did not live to know of the \$80,000,000 in pure gold brick that was to pour from the mill in later years. In 1860—the year after he first discovered his bonanza—he was lost in a snow storm close to his original claim.

The town of Bodie prospered and grew for several years until the inevitable peak was reached. As soon as the rich lodes began to thin out, miners, gamblers, saloon keepers and tradesmen began to migrate to other fields. The steady, hard-working family men were left to glean the remaining ore. But they, too, were driven away by the great Bodie fire of 1932 which swept through the main streets and razed the town without mercy. These fire-scarred remnants I gazed upon now. How strange it seemed, like a place I had never known.

E. Louise Sartor remembers the gold mining camp of Bodie, California, as a quiet, friendly place where holidays—the Fourth of July, Memorial Day, Christmas, even Chinese New Year's—were celebrated by all the townspeople as merry family occasions. Mrs. Sartor returned to her birthplace for a visit recently, and in this story she brings to Desert Magazine readers her memories of Bodie at the turn of the century as she recalled them in the empty, ramshackle ghost town of today.

The mountains, pocked with gaping holes and tailing piles left by prospectors in their eager quest for gold, looked dry and gray in the sweltering desert heat. Silence reigned. Only the faint tinkling of a sheep's bell could be heard in the distance. A rabbit, startled by my intrusion into his world of freedom, jumped from a nearby boulder and disappeared into his burrow. A few cattle grazed peacefully on scattered patches of green grass where a tiny stream inched lazily along.

The old stamp mill of shining corrugated iron seemed like a huge monster napping in the sun. The slightest disturbance might awaken it. I thought, looking at it now, and start again the crunching, pounding roar of machinery digesting huge quantities of ore. I sat on a sagging step of a long-forgotten home and tried to visualize the town I had known more than 40 years before.

Board sidewalks had lined the busy main street then. Saloons crowded close to each of the six general stores; only the two churches and the schoolhouse were any distance from the swish-creak of the swinging doors.

My home—where I lived with my father and three sisters—was next to the old firehouse. I remembered how frightened we children used to be when the huge bell clanged its summons for volunteer firemen to man the two-wheeled water cart. The same bell used to toll the years of deceased townsfolk as they made the slow trip through the streets to their final resting place in the cemetery on the outskirts of town.

The postoffice, a short distance from the firehouse, daily was the scene of much excitement as people gathered to await the arrival of the stagecoach with its passengers and mail. Store-keepers stood in their doorways to evaluate the customer value of new arrivals. Great clouds of dust could be seen long before the stage entered town.

Passengers were varied—a flashily dressed drummer; a slick gambler eager for an easy mark; a Wells-Farge agent who later would accompany



The ghost town of Bodie, California, one-time boom camp which produced \$80,-000,000 of gold during its peak years. Town cemetery in foreground. Frasher's Photo.

shipments of gold-brick out of town. Occasionally a pretty woman, dressed in the height of fashion and showing a trim ankle, stepped from the stage. But she quickly disappeared down the street to the section near Chinatown where white houses stood in a row. They were quiet little houses by day, but bright with lights at night.

The Chinese of Bodie were content to live alone, clinging tenaciously to their native customs and dress. The chief occupation of the majority was washing and ironing. Six heavy flatirons were heated on wood burning stoves—one in use, five waiting. A large wooden barrel of water stood next to the ironing board. With a long-handled dipper the Chinese laundryman would fill his mouth to sprinkle through pursed lips the dry, clean garment on his board.

As a rule, the Chinese district was quiet, but the Chinese New Year, celebrated in February, brought a week of jovial merriment. Everyone was welcome to participate in the festivities. Through several days and nights loud reports of firecrackers echoed about the buildings. Paper streamers and long, hanging prisms of glass that tinkled sweetly in the slightest breeze decorated the streets. Shops, which also served as living quarters, were lighted only by burning punks.

As children, we would visit the dimly-lit Chinese shops each New Year's, cautiously sidling to the door-

ways, easing our way in and patiently waiting for the proprietor to give us the treats we knew were awaiting us. We waited quietly until, at last, into each hand fell a few pieces of oriental candies and nuts, with a China lily bulb, a fan or a silk handkerchief.

Weird, high-pitched music played all day in the Chinese Masonic Temple. The older and braver children would climb to the balcony and peer in the window to see the huge buddha which seemed alive in the darkened room. There was much in Chinatown to terrify children, but not enough to send them skittering home before hands and pockets were filled.

The Paiute Indians occupied no definite section in Bodie, but they contributed to the town's daily life as much as did the Chinese. The Paiute mode of living was altogether different; their homes were the hills themselves. They had neither need nor desire to build houses like those of the white men or the Chinese. Rude shelters made of rags and sagebrush gave adequate protection from the weather.

The Indian women wore dresses of the brightest possible fabrics. All the garments were made by hand and were worn one on top of the other in endless layers. Most of the sewing was done on the streets of the town while the squaws sat and chattered in their Paiute tongue. Many times three or four dresses could be counted on one squaw as she stooped or when they

were blown by the wind. Tucked down in the bodice of her dress each Indian woman had a fat strip of bacon tied in a colored kerchief. She would fish out the salty meat and rub it over her face and hands many times a day, leaving a mirror-like glow on her redbrown skin. This was Paiute beauty—the shinier the skin, the more attractive the squaw.

It was a common sight to see a group of Indian women, with their bright blankets wrapped around their ample bodies and kerchiefs on their heads, squatting on the ground gambling away their small pieces of silver. They would sway back and forth when the babies strapped to their backs began to cry. No matter how loud or long the wails, the game never ceased. Now and then a mother unstrapped her child to nurse it, but her eyes never left the cards.

As dusk fell, one could see the Indians gather from all directions and wind their way together up the hill-sides. Later, little bonfires dotted the hills, silhouetting teepees and people against the horizon and filling the air with the smell of burning sage. These Paiutes were thriftless people, working only when driven by hunger and buying food from the back doors of the hotels—scraps from the white man's table.

I looked beyond the small church and watched the sage-covered road wind its way to the cemetery which nestled on the sides of small rolling hills. How desolate it looked in the surrounding stillness! The wooden fences that enclosed the graves were falling to the ground in molded heaps; those of iron had been twisted and rusted by the storms of the years.

Gazing down the half-hidden path, I could almost see the Memorial Day parade of uniformed Civil War veterans, marching to the tune of "Yankee Doodle" played on flute and drums. We children would proudly fall in line, our arms filled with flowers to be placed upon the flag-marked graves. Each year the day before Decoration Day, my two older sisters and I would gather wildflowers from the hillsides bluebells and daisies and wild onion. These were mixed with the fast-fading flowers ordered from distant cities. The fragile wildflowers gathered from our hills always lasted longest.

The glorious Fourth of July was always a thrilling time in Bodie. Small cottonwood trees were hauled into town, "planted" in large square oil cans filled with water and placed as sentinels along both sides of the street. It was one occasion which yearly demanded a new dress—and the general stores tempted holiday shoppers with a rainbow array of materials. How my sisters and I loved being able to choose from them the material for our dresses!

At daybreak on the Fourth of July, the pounding of the mill was silenced. The sudden quiet wakened even the soundest sleeper, for it was only on this one day of the year that the mill did not operate. Immediately new sounds were heard—those of firecrackers exploding and excited children shouting. Everyone gathered in the Miners' Union Hall for the beginning of the day's celebration. First on the program were songs by all the children, followed by the reading of the Declaration of Independence by the town speaker, whose silver voice matched his bell-shaped body. We children hardly saw the Goddess of Liberty or heard the band play, for free ice cream awaited us at the firehouse. Races and games filled the day, and for dinner almost every family ate out at one of the two hotels in

The climax of the day was the Grand Ball held in Union Hall. The orchestra—two violins and a piano—played quadrilles, polkas and waltzes far into the night for the dancing crowds.

On the following morning, the only reminders of the great day were the potted cottonwoods, their leaves withered and their boughs drooping. They were reluctantly taken away.

All through the years I have cherished the memory of the Christmas

season in Bodie, for it was at Christmas time that families and friends seemed to grow closer together. Perhaps it was because the naked ugliness of the town was changed by winter into a white vision of loveliness blanketed by snow. Lights from the windows cast ribbons of brightness down each home's path. It was like an invitation to all to enter and enjoy the warmth inside.

Through the week before Christmas, the young people had parties to string popcorn into long chains. The popcorn strands were used to trim the two large Christmas trees in the Miners' Union Hall where everyone gathered on Christmas Eve.

Stores displayed their fascinating array of gifts for weeks. Gaily-wrapped purchases were hidden until the day of Christmas Eve, when families carried their gifts to the Union Hall and placed them about the trees. Dolls were hung on the branches amid colorful decorations, popcorn chains and tiny lighted candles. Townsmen took turns watching the trees. Each tree had a guard who held a long stick with a wet sponge ready to douse any fire that might flare up from the candles.

Christmas was the time of year I

CLOSE-UPS

Kenneth E. Hickok, author of "Troopers' Lost Gold," this month's lost mine story, was born in 1905 in a southwest Kansas schoolhouse. He grew up on the family's Kansas farm but, when it came time to choose a profession, found that cows, pigs and wheat held no allure. So he became a mining engineer. After four years in South America, he returned to this country and spent 15 years more in the mining game.

the mining game.

In 1946 Hickok was crippled by polio and now, after six years, is "still on the ropes but slowly coming back." He has had several technical articles published before this, his first appearance in *Desert Magazine*. His home is in Ulysses, Kansas.

Bill and Edna Price have traveled thousands of miles of desert country the hard way—on foot behind a string of burros, all their belongings packed on the animals' backs. Edna tells one of their most warming desert experiences in this month's Life on the Desert prize-winning story.

Until she married Bill, Edna had never seen a desert. Neither had Bill. The two were working as nurses to an ailing millionaire when they decided they wanted see Death Valley. They quit their jobs, headed West and liked Death Valley so much they stayed. When the money played out, they traded their Ford for six burros and started walking. Step by step they saw California, Nevada, Arizona, the Arizona strip.

In California, Bill traded his last few dollars for a tintype camera. It proved a good investment. Taking pictures of tourists and people they met along the way kept the Prices eating during the years they wintered in Baker, California, and summered at Lake Tahoe. The intervening 500 miles were traveled by foot and burroback each spring and fall.

With the advent of World War II and the arrival of young Billy, the Prices found it necessary to make some concession to civilization. Bill now is fire chief in Idyllwild, California, a resort community in the San Jacinto Mountains, and Edna acts as Idyllwild correspondent for the *Hemet News*.

It was not until she became a grandmother that Louise Sartor attained her life-long ambition to be a free lance writer. Her story "I Remember Bodie" in this month's *Desert Magazine* is Mrs. Sartor's first sale—after filling endless wastebaskets with previous literary efforts.

In telling the story of Bodie, past and present, Mrs. Sartor is relating experience which is very close to her own heart, for she was an intimate part of the Bodie scene during the gold rush years.

Mrs. Sartor is a native of Bodie. Her father, Martin Holmdrup, was a Danish emigrant who settled there in 1880 and worked in the local stamp mill for 30 years. He met and married his wife, also a Dane, in the tiny California town. Mrs. Holmdrup died when Louise was 3 years old, leaving three small daughters in the care of their father and a succession of housekeepers. "I loved the excitement the arrival of each new housekeeper brought," confesses Mrs. Sartor, "and I always hoped they'd not stay long. The housekeepers stopped coming, however, when Father remarried in 1901.

In 1911, young Louise Holmdrup left Bodie to live with a sister in Canon City, Colorado. There she worked in the city telephone office until she met and married Samuel Sartor, son of a pioneer Colorado family. In 1929, the Sartors and their two small daughters moved to Santa Ana, California, where Mr. Sartor was employed by the Orange County Agriculture Department until his death six years ago.



Fourth of July parade in Bodie in 1903. Civil War veterans stand at attention before the colors as the annual Independence Day parade approaches.

loved best. Yet, the last year I spent at home was far from a happy one. The main popcorn party of the season with all the young folks invited was held in the home of the banker's daughter. There was no invitation for me. In such a small community it was hard to hide such a blow to one's pride, especially when one is just sixteen. I was no longer content to live in Bodie and pleaded with my father to let me go away. It was the following summer before he consented.

As I sat on the step of the old home and thought of these things the feelings of the past mingled with those of the present. I was again overpowered with a feeling of loneliness. Tears were close. Just then I saw my daughter coming. She too had been near the house with the sagging steps. She took my hand as we walked down past the old schoolhouse. The doors were boarded and windows covered. I wondered if the pegs on the wall of the cloak room where we children hung our coats and hats still were there. I longed for a drink from the buckets of water that were placed on a bench and the tin cups so badly bent from breaking the ice that formed over the top. The library had been at the head of the stairs, the shelves filled with worn books. I wondered if it too still was there.

I walked down the dusty road to the church. It was no longer as I had remembered it, prim and neat. The unpainted structure was in a sorry state of decay; yet, as though to spite the weather-beaten roof, the steeple stood erect. As I walked through the door, I noticed names and dates written on the walls of the entry—signs of disrespect left by tourists.

Patches of blue sky could be seen here and there where roof shingles were missing or a wall-board had broken in two. But the old pot-bellied stove stood as always on its familiar spraddling legs, and each of the handhewn pews was in its rightful place, thick with dust and spider webs. Seven of the Ten Commandments which had been so beautifully lettered on a large plaque on the wall above the altar were conspicuously missing. Only the first three, too high to be reached, remained.

Stumbling over the badly torn rug in the aisle, I sat in the seat that had been mine in Sunday School. I could no longer keep back the tears as I looked around at the destruction of a place I had loved so well. How could people — albeit strangers — show so

little respect for a house of worship?

When I glanced up, my son-in-law was standing with hat in hand, waiting to accompany me when I was ready to leave. A little of my faith in the younger generation was restored. For surely, if he appreciated the meaning of this building there must be others who shared his reverence for this ancient church, for — dilapidated and abandoned though it is—it still remains symbolic of the finest influence we had known in Bodie after those boom days when it was a lawless frontier mining camp.



Church in Bodie, California as it looks today. Fire destroyed most of the town in 1932, driving away the citizens who had stayed on after the rich ore veins pinched out.



Emil Morhardt, Death Valley artist, miner, poet and teacher, beside one of his water colors. He holds several copies of his "Death Valley Poems," published last year.

He Paints Pictures, 700 ...

By JOHN W. HILTON Photographs by the Author

T WAS at last year's Death Valley
49ers Encampment that I met
him, a tall, handsome man with
an infectious smile, sitting in the lower
lounge of Furnace Creek Inn with a
group of other artists. I had been
playing my guitar and singing when
someone said, "Give the guitar to Emil,
have him sing us a Tahitian number."

I handed the instrument to Emil, and a little bit of magic took place. Suddenly, we were transported from the white heart of the Mojave desert to a coral beach beneath coconut palms and a tropic moon. One could almost smell the sea and hear the booming of the breakers on the outer reef as Emil Morhardt—in a half tenor, half falsetto voice—sang an authentic Tahitian song. The transition was so sudden that none of us had time to consider the incongruity of such music in Death Valley; but then, I was to

Emil Morhardt has been photographer, South Sea traveler, actor, ballet dancer, composer, interior decorator and rockhound. Now "settled down" in Bishop, California, he teaches art and skiing in the local high school, prospects in his spare time, published a book of poems last year and paints in realistic water colors the mountains and sandy valleys of his desert home. In this story John Hilton introduces a remarkably versatile desert personality.

learn not to be surprised at anything that originated with Emil.

There were several more island numbers and then, without warning, the singer broke the spell with a comical western song called "Starvin' to Death on my Guverment Claim," and handed me the guitar. "Just to think," someone sighed, "he can paint too." "Yes, and write poetry," another added, "and run a gold mine, teach skiing and goodness knows what else."

When I looked at Emil's water colors, I was at once convinced that he really could paint, too. The paintings are crisp, clean and convincing; his colors are strong and solid. Pattern and design cooperate with good com-

position to present subject matter in a pleasing manner duly regarding good taste. Emil Morhardt's water colors reflect a normal, healthy admiration for the outdoors and the objects of Nature and an unusual knowledge of geological structure.

That afternoon I looked up Randall Henderson to see if he would be interested in an article on Emil Morhardt for *Desert Magazine*—and discovered that he was looking for me to suggest the very same thing! But writing an article on this man is not as easy as it may sound. In the first place, he is busy and hard to find; and when you do find him, he wants to talk about the future instead of the past, tung-

sten mines instead of painting and, indeed, almost anything but the facts one must have for a biographical story.

Finally, after about six months of trying, I cornered Emil for about an hour in my studio at Twentynine Palms, California, and held him down to the subject in which I was interested: Emil Morhardt!

Emil was born on the present site of Barker Brothers in Pasadena, California, on March 17, 1906, and attended schools in Pasadena, Chicago, Newark and Long Beach. He grudgingly admits that he distinguished himself at Long Beach High by serving as soloist for the Girls Glee Club. This shows that even at an early age he was unaffected by outside criticism. A lesser man would not have had the nerve to take and hold the position.

During his high school days, he developed a friendship with Roamer Grey who later was to be an important influence in his life. The two shared a common hobby of photography, and, because Emil had learned how to develop and print pictures, Roamer thought him a wonderful photographer.

Shortly after high school, Emil's father died, leaving a small candy manufacturing business for him to run.

"I promptly ran it into the ground," he states. "There was supposed to be a quarter of a cent profit in each pound of peanut brittle, but I somehow couldn't seem to find it."

Times had become so tough for Emil that he was reduced to trying to sell his beloved Jalopy. Looking for a buyer, he met Zane Grey's man, Bob Carney, who said he had been looking for Morhardt as a possible partner for Roamer Grey in a photographic venture. Roamer had sung Emil's praises so loudly and long that Carney considered him an expert in the field.

Before he realized it, Emil was up to his neck in Brownie film. "There we were," he remembers, "with \$50,-000 worth of photographic equipment and mighty little knowledge of the real problems of commercial photo finishing. Our business knowledge was even more sketchy." The camera shop was located in Avalon, on Catalina Island, however, and the boys had a wonderful time losing their shirts.

About then, Zane Grey decided he needed a photographic team to accompany him on his fishing trips through the South Seas. Roamer and Emil salvaged what they could and joined the expedition.

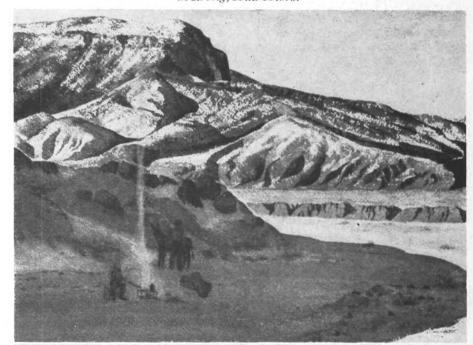
The South Seas! Tahiti, Southern Australia! The voyage spelled adventure to young Emil. Actually, "adventure" in the sense of hair-breadth escapes from danger and death were never a part of Zane Grey's trips. He did not believe in it. Such adventures, he felt, were simply the result of a lack of careful advance planning. There were storms at sea, to be sure, and the excitement of filming one of the world's greatest fishermen in action in the finest of fishing waters, but the only dangerous thing Emil can remember doing was to rescue an Island boy's bankroll.

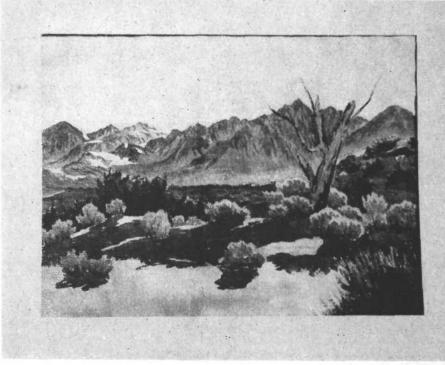
Grey paid his Tahitian boatmen in francs. One pay day a roll of bills accidentally slipped out of the hands of a native boatman and started to sink slowly in the clear water. The boatman just stood there watching his

wages disappear; so Emil dived in and recovered the bills. It was only after he was back on board that he realized the Tahitian was a far better swimmer than he, but too smart to plunge into these waters. Emil shuddered as the fin of a huge shark hissed through the water close to where he had been groping for the francs.

Emil spent about a year in Tahiti. He chose quarters in a grass shack on the beach instead of up on the hill with the others. He explained that this placed him in a much better position to get acquainted with the islanders and to attend their songs and dances. Their music fascinated him and he

Two of Emil Morhardt's water colors. He paints with sure, bold strokes in strong, solid colors.





found the natives more than willing to teach him Tahitian songs and chants like those we heard in Death Valley.

Of course I asked the inevitable question: Did he meet any of the gorgeous Tahitian charmers everyone writes about? Emil's answer was surprising. "Well, John," he smiled, 'there were plenty of them there, but the thing that I noticed first was their feet. It grew on me, I just couldn't keep my eyes off their feet. Maybe I met some pretty ones, I wouldn't know. Their feet were all terrible. Walking over the coral rocks, barefoot since childhood, had given them splayed, swollen toes with a hard crust that was disgusting to me. And their ankles were just as bad-covered with the dark scars of coral cuts. No, I didn't fall for any of them, not even with the aid of a tropical moon, soft breezes and the murmur of the southern sea.

Emil had many tales to tell of Zane Grey on these trips. Once the boys on the photographic boat decided that, after all, Zane might not be the best fisherman in the world. Given the cash to get to the best fishing waters and to hire the finest boat boys, and given the advantage of the best tackle and equipment, anyone might become an outstanding fisherman. To prove their point, the photographers decided to fish too. They had identical bait and tackle, the same type of boat, and they fished the same waters with the same boatmen for a month. During that time, Zane Grey landed 21 swordfish and they ended with a score of one between them. Grev could sit and fish for ten hours without saying a word, Emil recalls, and then suddenly, by some sixth sense, come alive just before a fish struck. His boatmen said he could smell a fish a mile away.

Back from the South Seas, Emil somehow found time to take up Russian Ballet and even to teach it. He also played the part of Padre Salgado in the Mission play, wrote musical scores for films, did more photography, graduated with a master's degree in music from Claremont College in California, went into and out of the interior decorating business and wrote more than 300 songs.

While studying at Claremont, he became acquainted with *Desert Magazine* writer Jerry Laudermilk, who introduced him to rock hunting. Hunting pretty rocks led to serious prospecting and a study of geology, and soon Emil found himself in and out of a good many mining ventures.

It was in the desert that he first became interested in painting. In Tahiti, he had realized that photography had its limits when it came to portraying his feelings about Nature. In the desert,

he again felt the need to redesign a scene to get the most out of it. The painting was a natural outgrowth of his photography. It started about 1941 and now he never carries a camera. His paintings have become increasingly better and his recognition has grown with the improvement, but he still does not consider painting as his prime purpose in life.

Emil lives with his wife and children in Bishop, California, where he teaches art and skiing at the local high school. He is head of the Sierra Nevada Interscholastic Ski Federation, and several of his group have become champions. He also has organized a symphony orchestra and directs choral groups for special community occasions. Last year he published a collection of Death Valley poems, illustrated by his pen sketches and photographs.

Of all the things he has done, Emil Morhardt says mining is the most fascinating. He likes the feeling that he is producing clean, new wealth, untarnished by other hands or other people's hard luck.

With his paints, too, and his poems, this versatile desert artist is creating clean, fresh beauty in a world in which the simple, basic elements of life are too often obscured by the tarnish of materialistic existence.

INDIAN TEXTILES MADE AS EARLY AS 750 A.D.

The textile art of the Indian dates back in known history long before the coming of the white man. When the first Spanish expeditionaries reached Pueblo territory in 1540, they found the Red Men wearing blankets of hard woven cotton ornamented with embroidery. Examples of woven textiles have been found in ruins dating back as early as 750 A.D. These were made of fine textured cotton or fine yucca fiber.

Weaving in wool probably began about 1600 with the introduction of sheep into the Southwest by the Spaniards. Navajos learned weaving from the Pueblo Indians, and first wove blankets as outer garments for both men and women.

Today the Navajo is the principal weaver among Southwest Indians. The women usually attend to the entire process, from herding the sheep through carding, spinning and dying the wool to weaving the blanket or rug on looms set up near the entrance to the family hogan.

The younger weavers now are experimenting with various combinations of dyes and different designs, combining the striking geometric patterns of the Pueblo arts with those of their own tribe.—New Mexican.

Howard Clark Champion Liar

Howard D. Clark, Knott's Berry Farm entry, was awarded the first place trophy in the 6th annual Pegleg Smith Gold Trek and Liar's contest held in Borrego Valley, California, October 11. Second place went to Guy O. Glazier of Boulevard, California,

In the women's division first place winner was Gertrude Ritchie of Chula Vista, California, and second honors went to Josephine Scripps of Santee, California.

Dave Olmsted, secretary-manager of the Roads to Romance Association with headquarters at Long Beach, California, was master of ceremonies. The trophy awarded to Howard D. Clark was a miniature figure of Pegleg Smith cast in bronzed plaster. The figure was sculptured by Cyria Henderson for Ray Hetherington, who makes the annual presentation.

The Liar's contest this year was held in the natural canyon amphitheater which the Borrego Springs Chamber of Commerce has graded and lighted for this and other outdoor events.

Many wild and fabulous yarns were told by the 30-odd contestants who took part in the contest, and nearly half of the 500 spectators who gathered in the canyon for the event brought their camping outfits and remained overnight.

"On de Rocks Mac" McCain, twice winner of the Liar's contest, was an entry this year, but failed to qualify. Interspersed between the tall tales were musical numbers supplied by Borrego Valley entertainers, and by the famous Kitchenaires of Julian. California.

On Sunday morning following the Liar's contest, a caravan of those present motored to the Pegleg Smith monument in the north end of Borrego Valley and each visitor deposited 10 stones on the growing monument, in accordance with a custom established six years ago.

Management of the Pegleg Smith program each year is in the hands of a board of directors of which Ray Hetherington is chairman. The Borrego chamber of commerce of which Hugh Woods is president, has sponsored the improvement of Pegleg Canyon as a permanent site for the contest. The land was donated by the A. A. Burnand family, pioneer developers in Borrego Valley.

Life on the Desert

By EDNA PRICE

HE WINTER of 1937-38 was one to remember on the desert. Snow lay on the low brown buttes around Baker, California, and the winds took on a new bone-chilling intensity. Everything that would burn had been stoked into little wood stoves until the desert looked quite swept of man's refuse.

I was searching the dump one day for overlooked bits of wood from old car frames, when I heard a rasping cough, and there on a pile of rags in the shelter of an old car body, I saw a wisp of humanity—just rags, beard, dirt and bone—coughing out his lungs to the raw November winds. With each labored breath, pinched nostrils winged in and out, and a dark flush glowed high on one wasted cheek.

"Why, you have pneumonia," I

"Yeah, guess I'm done for," wheezed a thin voice, as the figure huddled farther into his bed of rags.

I ran for Bill. "There's a sick man on the dump-what shall we do?"

"Take care of him, of course," snapped Bill, snatching a blanket from our bunk. Together we carried the wasted morsel of flesh to the shed where we kept our burros and laid him on a pile of clean straw. So long had we depended solely on ourselves, we had forgotten that there were county hospitals. Bill became his nurse, just as he had always cared for helpless people, wounded animals, encountered on our travels.

Our patient had no home, he gave no name. He was just a bindle stiff on his way to nowhere. All that he owned, he wore upon his back, ragged clothing under a filthy army overcoat that he called his "binney." So we

named him Binney.

With warmth, food, shelter and Bill's care, Binney slowly recovered. Like a forlorn mongrel seeking a home, he adopted us. When I opened our dugout door to toss the morning wash water, I found Binney perched on the top step, wearing a toothless apologetic smile, waiting to be asked in to breakfast. At noon, Binney shuffled to our door and patiently awaited lunch. And come sundown, Binney always showed up with Bill, proudly leading one of our burros. Although he toiled not, Binney was vastly proud of Bill's ability to wrest a living from tourists by means of two burros and a second hand camera.

A new suit of clothes, and a dollar bill — these were the things that completely changed one man's life. This Christmas story was one of the winning entries in Desert Magazine's Life-on-the-Desert contest in 1951.

In our six-by-ten dirt dugout, there was no place for Binney to sit, save on our bunk, and this made me wince. I had been brought up to consider one's bed rather private territory, certainly not a roosting place for a ragged, maybe lousy little bindle stiff. I felt sorry for Binney, I told Bill, as I carefully folded the top blanket and laid it away for the night, but I did wish he would drift on to his next destination. Bill was shocked-and Binney

One evening Bill and Binney led the burros home at dusk, followed closely by one of those women tourists bent on seeing behind the scenes. She had a mild little man in tow, obviously distressed over their intrusion. She poked her head down the stair-well, and yelled gaily, "Yoo-hoo down there! May we come down?"

"Well, yes," I murmured a bit reluctantly, "If you can manage to squeeze in." and I went on dishing up red beans and cutting corn bread into

large squares.

Come on, Herbie," she commanded, and obediently Herbie fol-

They climbed up beside Binney with a curious sidewise look at the little figure trying to lose himself in the shadows. "Tell me," commanded our guest,

nodding toward Bill, "What does he do with those burros? Why does he wear that beard? Who are you anyway? How do you make a living? Why do you live in this—this place? And what is that heavenly food you are cooking?"

I glanced at Bill. He and Herbie seemed to be carrying on a quietly interesting conversation. "Why don't you eat with us, while we tell you?" I asked, and reached for two more plates and mugs.

"Herbie," she shrilled delightedly, "We are invited to dinner," and promptly edged over to the hinged shelf that served as our table.

After supper Binney slipped unobtrusively into the night. "Who is he -tell me about him," asked our in-

We told her about Binney and his pneumonia; about our Death Valley days, and Bill's trading of our Ford for a string of burros; of the years afoot since then, and the tin-type camera that Bill had purchased for seven dollars which was now our livelihood. Hours slipped past, while the voluble tourist sat silent, open-mouthed.

At last we were through, and she found her voice. "You must write," she announced firmly. "I won't take no for an answer. I'll send you paper, pencils, books on how to write. Herbie and I own a diet sanitarium in Los Angeles, and busy as I am, I still try my hand at writing, soap contests, everything. And so can you."

I shuddered. Was this human dynamo going to take over my life and run it at the same fast pace she ran her own? I didn't want to write. I only wanted to walk out on the dunes to watch the ever-changing pattern of light and shadow, and the small busy insect life at my feet. I wanted to sit quietly in a stillness so profound that it tinkled in my ears like distant burro bells. I'd been hiking for years, and now I wanted to rest. This woman wore me out with her terrific enthusi-

True to her promise, the Los Angeles tourist swelled the Baker mail bags with everything a budding authoress could desire—paper, pencils, "Narrative Writing," "Expository Technique," "How to Win a Contest." Dutifully I wrote my thank yous, and piled the books in a corner of the dug-out.

The days slipped past and Christmas drew near. My mind went back to other Christmases. We chuckled over the one in Death Valley when Indian Tom Wilson ate our duck from the salt marshes, muttering gloomily, "Bacon 'n eggs, hotcakes 'n honey, that's what I like for Christmas din-

Sighing, I studied the leaden skies. If the weather didn't clear up soon, Bill couldn't take pictures, and that meant less beans for Binney, Bill and

Christmas morn dawned bright and chill. Bill went jubilant to work, but in ten minutes he was back, pushing a wheel-barrow on which careened two bales of hay, a sack of oats, and a huge brown paper carton. "The diet sanitarium sent the burros a Christmas dinner," he announced, patting the sack of oats fondly. "Wonder what's in the box?"

"Books," I said, "More books." Bill ripped it open, and disclosed food such as we had not even dreamed of for eight long years. There was everything from roast chicken to mince pie. Mentally I began dividing it with my neighbors, while Bill tore open letters from the patients in the food sanitarium, and packages containing socks and warm pajamas. There was even one package marked "For Binney."

We called him in and placed it in his thin little out-stretched arms. It made us gulp to see him standing there, looking down at his burden with that heart-breaking slow look of wonder, disbelief and incredulous happiness.

"For me?" he lisped with that toothless grin.

"Open it," we urged.

Slowly, as if prolonging the eestasy of this moment, Binney untied the string, which he carefully wound around one finger before stuffing it in a ragged pocket. He folded back the wrappings, and took out a warm grey sweater, then a pair of good woolen pants, long underwear, sensible black shoes, a felt hat, even a tie and hand-kerchief. There was nothing missing from Binney's new wardrobe. His watery eyes caressed the warm soft clothes—new clothes!

Suddenly he gathered up the whole

outfit and ran to the door. In a few moments he was back, dressed in all his finery.

"How do I look?" he chirped. "How do I look in good clothes?"

"You look fine, Binney," we assured him, but Binney did not hear. He had thrust one hand into his new sweater pocket, and come out with a crisp new dollar bill. He caressed it, studied it, smoothed out imaginary creases — dreaming. Binney straightened up, threw out his thin little chest, and right there from a crisp dollar bill and a handful of new clothes, another Binney was born.

The next day he left Baker. "Going to hock his new clothes for wine." sneered someone. Not so. In a month he was back, shaven, clean, and in business. The dollar bill had been invested in needles and pins which he was selling far from dime store competition.

For a long time we saw no more of Binney. Then one day an old car stopped by Bill's stand, and out hopped Binney, possessor of a car, a partner,

and a set of new teeth. Binney was a salesman, a man of affairs. Binney even had a name. The bindle stiff was no more.

So it was that this became our most memorable Christmas of all, the Christmas when the kindliness of a passing tourist reached out to the refuse dump of humanity, to lift back to his place among men, a forgotten little bindle stiff.

Hard Rock Shorty

Death Valley



By JAMES D. KIRKPATRICK

Hard Rock Shorty had gone over to Rhyolite in Nevada to see if he could get a drilling job for a few weeks. He needed money to keep him in grub while he did the annual assessment work on the various claims he had staked out around Death Valley.

There was no difficulty in getting the job. The rock at Rhyolite was hard, and expert drill men were in demand. Shorty was known to be one of the best. The boss at the Silver Moon mine told him to come to work next day on the morning shift.

That night in the bunk-house the conversation turned to rock, and the experiences of the men whose job it was to blast it into workable chunks of ore.

One of the miners had come recently from the Cripple Creek district in Colorado. "Hardest rock I ever seen in my life," he explained. "Kept seven blacksmiths busy sharpenin' drill bits fer each shift. Hit one vein down there so tough we used three barrels o' drills an' hardly scratched the surface of it."

This was too much for Hard Rock Shorty. In his 37 years of mining he had encountered about every kind of rock known to the drilling fraternity.

"Aw shucks! That's nothin'," he exclaimed. Over in the Panamints where me an' Pisgah Bill has that corundum mine we hit a ledge so tough we used nine barrels o' drill bits on 'er and the hole still stuck out four inches."

Useless Trees Called Water Robbers

"Useless trees and shrubs in the West consume and waste almost as much water every year as could be stored in Lake Mead behind Hoover Dam," claims T. W. Robinson, district engineer of the Geological Survey station at Carson City. Nevada, in a report released recently by the Department of the Interior.

According to Robinson, there are two ways by which the tree-wasted water could be saved—either by pumping before trees have consumed it or by destroying the unwanted vegetation and supplanting it with more valuable growths. Mr. Robinson is convinced that there is no available source of reclaimable water so large as that involved in the unwanted vegetation problem.

Current data show a total of more than 11,000,000 acres covered by unwanted vegetation in 14 of the 17 Western States. This acreage consumes 16,750,000 acre-feet of water annually. Considering three States where no data are available and five where data are meager, it is estimated that at least 25,000,000 acre-feet of water are lost each year.

This amounts to twice the average flow of the Colorado River, or about 75 percent of the total storage capacity of Lake Mead.

What is this unwanted vegetation and how does it rob humans of enough water to build up new cities in arid regions? "Classed as phreatophytes," Robinson reports, "are some 50 different species of plants, mostly worthless, whose habit of pumping or lifting ground water, sometimes from great depths, and dissipating it as vapor in the air costs this nation billions of gallons of water daily. The range of these plants is increasing."

Among the major water wasters in Southwestern United States are the alder, arrowweed, batamote, cottonwood, mesquite, rabbitbrush, willow, big greasewood, salt cedar and saltgrass.

Looking toward the reclamation of at least part of this wasted water, scientists are now studying each type of unwanted vegetation to determine how culpable it is as a water robber.

In discussing the possibilities for reclaiming water that is now lost to the air, Robinson points out that much could be gained by substituting plants of high economic value for the useless phreatophytes

"Increasing the efficient use of ground water by substituting plants of higher economic value," he says, "has not yet been attempted on a large scale. But it is thought to have merit over the more common methods of pumping or drainage; the substituted plant digs its own well and pumps its own water."—Los Angeles Times.

Letters

He Dug Rose's Well . . .

Puente, California

Desert:

I enjoyed reading "They've Tried to Tame Death Valley" in the August *Desert*. I was especially interested in the map, on page 8, which shows the location of Rose's Well.

One of the men who dug that well still lives. E. E. Palmer, 78 years old and still healthy and alert, lives in Glendora, California. He and G. W. Rose, my husband's father, brought in the well on the Amargosa Desert in Nevada.

Mr. Palmer and my father-in-law operated stores in the early mining camps in Death Valley.

MRS. M. A. ROSE

Memories of Tonto Basin . . .

Whittier, California

Desert:

Weldon Heald's article on Tonto National Monument, which appeared in the October issue of *Desert Magazine*, aroused childhood memories of a summer spent in the Tonto basin. My uncle, J. C. Whitney, was putting in the intake of Roosevelt Dam (then called Tonto Dam), and Mother and I had gone to visit their camp during summer vacation from school.

How well I remember the cliff dwellings that Mr. Heald writes about in his article! Though our camp was a good many miles away, the prehistoric apartments looked but a stone's throw from our tent. At a certain time each day, the sun shone directly into the caves and brought out in stark detail the chalky beauty of the city in the blue mountainside. In those days the cliff dwellings drowsed, year in and year out, rarely visited by humans.

It was chiefly Apache labor that built Roosevelt Dam, and the Indians had established a village near the project. The framework of their huts or wickiups was made of poles around which were woven reeds or willow wands from the marshes along the Salt River. Brush was piled on top, as much as the slight structure could bear, insulation against the sizzling Arizona sun. When the tribe moved, the houses went along. The poles were taken down and bundled, and the collapsed wickiup was dragged behind burros or ponies. A wide trail of small furrows led to the new campsite.

The Indians were fascinating. On our occasional visits they would

proudly display basket work and pottery. There never was much conversation, however. None of them spoke more than a few words of English, and they all refused to admit they could understand any of it. Communication was accomplished by gestures, nods, head shakes, no sabes and the few Spanish words in our vocabulary.

The area abounded with curious creatures of the desert. The Apache boys liked to catch Gila monsters, tie string leashes around their necks and lead them about as pets. The reptiles were slow, but then the Apaches boys were never in a hurry anyway. Time stood still in that unforgettable Tonto basin.

THELMA BLACK

• • • • 100,000 Miles of Travel . . .

San Diego, California

Desert

I enjoyed reading W. Deane Wiley's story, "The Salt in Salton Sea" in the October issue of Desert Magazine, I am an old desert rat myself and remember when the salt works were going full blast. I worked as a railroad engineer for Southern Pacific in the days when it took a week to make the trip from Los Angeles to Yuma and back. I was caught in the Big Flood, when water reached from Signal Mountain to the foothills beyond Laguna Salada; and I have seen wild water coming across the desert at Ogilby 20 feet high, watched a mile of track disappear beneath it.

Later, Archie Greenleaf and I, driving a White Steamer, pioneered trucking into Imperial Valley. We hauled building material into El Centro for the boom of 1912 and butter back to

San Diego.

Keep sending us *Desert*, and see if you can top my record of travel—over 100,000 miles in Mexico and through all 48 states via trailer, jeep and afoot.

. . .

ROY MORRISON

He Loves Burros, But . . .

Albany, California

Desert:

In the box on page 17 of the October *Desert Magazine* appears the statement, "conservationists and wild-life lovers have fought to protect the wild burros." I don't believe any true wildlife lover or active conservationist would agree that these four-legged "locusts" should be protected in primitive areas.

In my part of the Panamints these animals have so contaminated the waterholes that they are not fit for humans or other animals to use. Native plants, except the creosote bush and a few others, are destroyed — if not eaten, they are tramped to pieces.

These bushes normally would offer food and shelter for rabbits, quail and other birds and small animals.

You mention the "alleged" interference of burros with mountain sheep. Experience has taught me that where the burro takes over, the bighorn disappears. So do the cottontail and jackrabbit.

You suggest that a burro refuge be established. But who would fence the area, and who would feed the animals? Certainly they would have to be contained to prevent their spread to other parts of the desert.

I love burros as much as anyone could love a dog or cat or any other domestic animal. But if they are domestic animals they should be treated as such and not as native wildlife.

BILL MYERS

Another Recruit . . .

Lemon Cove, California

Desert:

I have been roaming our deserts and mountains most of my life, and it makes my blood boil to see some jerk empty a tin can and calmly toss it to the ground, adding to the litter which defaces so much of our beautiful country.

More power to Weldon Heald and all others like him! And sign me up

for the anti-litter campaign.

CECIL J. SEE

. . .

Secret Salt Signals . . .

Los Angeles, California

Desert:

The article, "The Salt in Salton Sea," in October's *Desert* was of particular interest to me. Both the Liverpool and Standard companies had stationed agents in Washington and at Mecca, the story relates, to report the signing of the saline lands bill so that they might be first to file on the choicer salt fields in Salton Sink. "The Standard Company had secretly stationed a man on top of the telegraph office." Now, who put that man up on the roof and who understood codes and signaling methods enough to make him useful?

The article goes on to mention James S. Henton. I have not heard of James Henton in 50 years, but undoubtedly he was behind the signal scheme.

When I was a buck private in the Signal Corps of the California National Guard in 1898, James S. Henton was first sergeant and an expert signal man. We sent most of our messages by means of a heliograph, using a four-inch glass with Morse code or four-foot flags by day and lights by night with Meyer code. Henton left the corps in 1899 for the desert country.

(Name withheld by request)



Their bodies blackened with paint and their heads encased in heavy horned headdresses, Buffalo dancers perform each Christmas Eve at San Felipe Indian Pueblo. They carry bows and arrows and gourd rattles. Photo courtesy New Mexico State Tourist Bureau.

Christmas Eve in San Felipe

By DOROTHY PILLSBURY Art sketch by Margaret Gerke

ON THE west bank of the Rio Grande River the Indian pueblo of San Felipe spread out before us like an oriental print in the weird greenish light of a lop-sided moon.

On the edge of the pueblo we could see silhouetted against the sky, the dim outlines of the two belfries of one of the oldest and most beautiful churches in New Mexico.

This was Christmas Eve, and we had come to witness the strange dances which we had been told were enacted each year before the 200-year-old altar of this Franciscan mission.

We sat in our car drinking cups of hot bouillon and steaming coffee from our thermos bottles, and eating chicken When Christmas comes to the Indian pueblo of San Felipe on the bank of the Rio Grande River in New Mexico there is enacted each year a strange ceremonial in which the pagan dances of the tribesmen are blended with the Christian rites of the Franciscan church in a midnight mass program unlike anything seen elsewhere in America. Here is an eye-witness story of this unusual Christmas ritual.

sandwiches. In a few of the thick-walled adobe houses a candle flickered in the window, but otherwise there appeared to be no sign of life inside. A few Indians wrapped in blankets passed silently as ghosts through the empty streets. We wondered if for reasons unknown to us, the midnight

mass with its accompanying dance ritual was to be omitted this year,

And then from the distance we heard the muffled beat of Indian drums. We followed the eerie sound through a transplanted forest of pinyon trees leading to the church.

When we pushed upon the heavy, hand-carved mission doors, we found ourselves in another world. Thick adobe walls, freshly whitewashed, soared to a dim high ceiling. Down the center of the nave, a wire had been stretched on which half a dozen lanterns made orange colored balloons in the dimness. Half way down the walls on either side, tall iron stoves fairly vibrated with burning cedar wood. Up ahead in the shadows, candles lighted the high altar. Indians and Spanish and Anglo visitors seated

themselves on blankets spread on the hard-packed adobe floor or propped themselves along the cold walls. All around surged muted conversations in English, Spanish and in several Indian tongues.

High up under the shadowy roof, in a choir loft in the rear, young Indians practiced choral responses for the Midnight Mass. A little nun pedalled a melodeon and led the singing. The old choir loft groaned and creaked with each footstep and each crescendo of laboring organ and young voices.

The priest and an Indian boy came to the altar. The padre intoned the service in a sweet mellow voice, and the nun and her charges answered from the choir loft. Immediately the adobe floor was filled with blanket-wrapped, kneeling people. One old Indian near me was so completely shrouded in a great thick blanket and remained so motionless, I wondered if he could possibly be alive. He made no responses. He never changed his position. Enclosed in his tepee-like blanket, he simply disappeared from all contact with the scene into a world of his own.

In the midst of the service, two young Indian couples went forward to the altar rail and were married in a simple ceremony which included the wrapping of a stole about each couple's shoulders. The brides showed no wedding finery unless bright shawls pulled down to their eyebrows and deerskin boots with twinkling silver buttons were the equivalent. It was a touching, beautiful service, and it was in a



Deer dancers lean over short canes, wear deer horns in their dance impersonation of the four-footed creatures of the forest.

minor key. Everyone was serious and respectful.

Almost before the last response of children's voices had faded into shadowy space, came the staccato, hairraising throb of Indian drums. Indians sprang to their feet. The old fellow beside me came suddenly alive. The

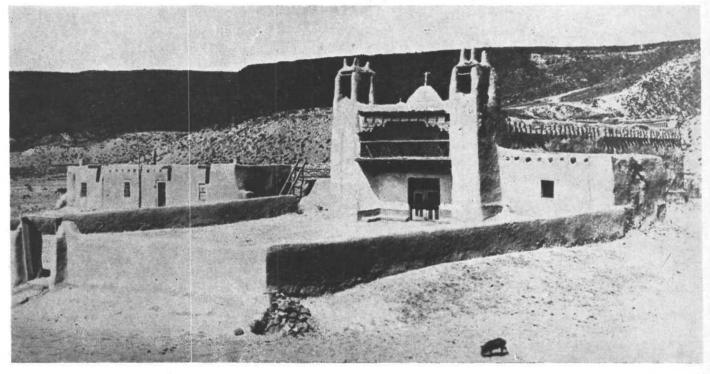
center of the church was cleared. People packed themselves along the great thick walls. The scent of spruce boughs, burning cedar chunks, guttering candles, incense and woolen blankets filled the place. Excitement sped like an electric current from person to person.

In came the drummers, pounding as if ten thousand devils were to be driven from the scene. In whirled dozens and dozens of dancers in the gayest, most exuberant dance I had ever seen in all my years in this land of Indian dancing.

Although these were Pueblo Indians, they were dressed in Navajo finerythe women in layers of full swaying skirts, rainbow colored velveteen basques; the men in blue levis and pink, blue and purple shirts. Turquoise pellets dangled from their ears, silver chains and coral and turquoise ornaments swayed inch deep around their necks. Bracelets jangled and flashed on uplifted bronze arms. Rattle gourds beat out a rhythm such as we had never heard. It sounded like pebbles tossed by an exultant sea along an endless shore. Here was no minor key. Here was joy let loose.

It was not the quiet joy of the Christian service. The Indians returned to an earlier, more primitive joy known when the world was young. It was as penetrating as sunlight, it was unrestrained as winds blowing over the great plains. It was whirling, ever-active color; it was rhythm mov-

Midnight Mass and Indian dances mark Christmas Eve in the 200-year-old Franciscan church at San Felipe Indian pueblo on the banks of the Rio Grande River in New Mexico. Photo courtesy of the Museum of New Mexico.



ing in up-sweeps of sound like bird notes in untouched forests. The faces of spectator Indians glowed like cedar fires. Spanish Americans moved their bodies to the insistent tempo. Anglo faces lost their masks of worry and restraint.

I went over to the old Indian who had disappeared death-like under his blanket during the early part of the ceremony. He was very much alive now. His eyes were shining. His face glowed with emotion. His old body was erect and tense with the rhythm. "What do you call that dance?" I asked, hoping he could speak English. "It is the most beautiful I have ever seen."

"Navajo Dance, Navajo Dance," he chanted hardly taking his eyes from the swirling, ever-moving prisms and arcs of color that filled the body of the old church.

But that dance was only a curtain raiser for the animals. To a slower beating of the drums, in lumbered a herd of buffalo. The dancers had painted their torsos black. Their heads and shoulders were covered with buffalo pelts. To the tip of each horn was fastened a fluff of eagle's feathers. In one hand each dancer carried a rattle gourd and in the other a bow and arrow.

They danced slowly and majestically to the heavy hoof-beating of the drums. The thick walls of the old church vanished. Such was the magic of the dance that we were transported in a whisk out to the limitless plains where the "hunch-backed cattle" were lords of all.

Suddenly the tempo of the drums became lighter and faster. In came the deer. These dancers were bent over short canes to make them look like quadrupeds. On their heads, deer horns were fastened in a headdress. Their steps in contrast to the buffaloes' majestic pantomime were dainty and graceful. How human beings bent over short sticks could so give the impression of the shy creatures of the forest is a mystery. They sniffed curiously at imaginary shrubs, they nibbled imaginary tender leaves, their heads bent to one side as if savoring the flavor. They listened taut as wires to suspected dangers and skipped at full speed to imaginary shelter with the stiff-legged gait of deer fleeing down a mountainside.

Toward the end of the dance, buffaloes and deer approached nearer to the high altar. Some mounted the steps. In a wattled manger lay El Santo Niño—the Holy Child. Animals of the forest and plains presented the Child with sprigs of their sacred blue spruce, the symbol of everlasting

life. Then they lumbered or skipped out of the old Franciscan church.

Dazed by color, sound and imagery, we found our way back through the village to the parked car and watched the blanketed Indians return to their cubical homes along the old river of romance. The lop-sided moon had disappeared. Only the early morning Christmas stars lighted the dim hills and dimmer mountains as we rolled back toward Santa Fe. It was four o'clock on Christmas morning. We had attended midnight mass in an ancient, unspoiled Franciscan church. We had been to an Indian wedding. We had been out on the Great Plains with the buffalo. We had visited the dappled forests of our pristine wilderness where deer skitter through light and shadow.

We had not only kept a Christian Christmas, we had seen Earth-Mother sped along her way in the rhythm of the seasons toward sunnier days and seed-planting time. We had known some of the joy that was here when the earth was young.

OCOTILLO IS MEMBER OF CANDLEWOOD FAMILY

Many people think cactus is the only thing that grows on the desert. As a result, many plants of the desert are referred to as cactus when they are not.

A case in point is the ocotillo, Fouquieria splendens. Commonly called "monkey tail cactus," it is a member of the candlewood family and not a cactus at all. "Monkey tail" would be as descriptive as its other popular names, Jacob's staff or coach whip, but the word cactus should be omitted.

The candlewood family is a small one, and the octillo is the only member that is native to the United States.

—Arizona Republic.

TRUE OR FALSE

Even if your rating isn't very high in this month's True or False, you will still add much

to your store of knowledge regarding the geography, history, botany, mineralogy, Indian life and general lore of the desert by taking this test. So, you win even if you lose. Twelve to 14 correct answers is fair; 15 to 17 is good. Eighteen or over is exceptional—and very excellent. The answers are on page 29.

- 1—The desert sidewinder is a venomous reptile. True . False
- 2—Carlsbad Caverns are in Texas. True . False
- 3—As far as is known the Yuma Indians never built cliff houses.

 True . False .
- 4—Chrysocolla generally is found in iron ores. True . False
- 5—The Kaibab Forest is on the Wasatch mountains of Utah. True False
- 6—Botanically, the Joshua Tree is a member of the Lily family.

 True . False .
- 7—Father Garces was killed by the Indians at Yuma, Arizona. True False
- 8—Canyon de Chelly is in the watershed of the Colorado River.

 True . False .
- 9—Recreational facilities at Lake Mead are administered by the National Park Service. True False .
- 10—Pinyon nuts grow on Juniper trees. True . False
- 11—Bloodstone is red chalcedony. True . False

False

- 12—Shipaulovi is the name of a village on the Hopi reservation. True False
- 13—Ubehebe Crater in Death Valley still emits steam occasionally.

 True . False .
- 14—Most of the species of agave, or wild century plant, bloom once and then die. True . False .
- 15—The route of the old Butterfield stage road crossed the Colorado River at Yuma. True , False .
- 16—Water flowing in the Bill Williams river eventually reaches Lake Mead. True . False .
- 17—Coal mining formerly was an important industry at Gallup, New Mexico. True . False .
- 18—Metal which comes from the open pit mine at Ruth, Nevada, is mostly copper. True . False .
- 19—Antelopes roam at large in the Death Valley National Monument.
 True . False .
 20—Pauline Weaver was a famous woman stage driver. True .

Here and There on the Desert

ARIZONA

Shine Smith Plans Party . . .

TUBA CITY - Shine Smith, who has spent his life as a missionary among the Navajo Indians, plans another Christmas party for the Indians this year, according to his recent announcement. The place the party will be held is determined early in December when the condition of the reservation roads is known, and when news of the party goes out through the trading posts hundreds of Indians gather for a feast and gifts. Used clothing and money for the annual party are contributed by Americans all over the United States. Those desiring to contribute should address Shine Smith, Tuba City, Arizona. Last year eight truck loads of food and used clothing were distributed to 2500 Navajos.

Primitive Seris Like City Life . . .

TUCSON — American civilization is mah-sheem, three members of the primitive Seri Indian tribe of Mexico decided after a visit to Tucson. Mahsheem is an adjective denoting approval, explained William Neil Smith II, Tucson anthropology student who has become the leading expert on the Seris after five years of work among them. Smith brought the trio to Arizona for a month at the end of his most recent visit to their tribal home on Tiburon Island, largest island in the Gulf of California. Among the most primitive Indians in North America, the Seris have resisted civilization for 300 years, struggling for existence in a land where a lack of water forbids agriculture.—Arizona Republic.

Last of the Apache Chiefs . . .

WHITERIVER — Entrusting his soul to the white man's God, Arizona's Apache Indians buried the last of their hereditary tribal chiefs in Christian rites October 15. Chief Baha Alchesay died at the age of 84 after a long illness. He failed to name a successor before he died, thus ending, probably forever, the long line of Apache tribal chiefs.

Like his father before him, Chief Baha had been a scout for the army, attempting to bring peace to the Southwest. His father, A-1 Alchesay—his name adapted from the "Apache-1" numerical designation given him by the army in 1870—had refused to join Geronimo, Magnus Colorado, Vitoro and Cochise in their fights against

the whites and had withdrawn into the White Mountains where the last of his tribe remains today.

Chief Baha long ago had advised his tribe to accept the ways of the white men. Even in death he set an example for them. Turning his back on the Apache gods and the medicine men, he had joined the church 18 years ago, and it was his last wish that he be given a Christian burial. After the service in the tin-roofed Lutheran chapel on the reservation, the old chief's body was taken to a glade overlooking the White River and buried, as he had wished, away from his tribal ancestors. Some say he selected this secluded burial spot so that, as a Christian, his remains would not desecrate those of his ancestors. Others believe he just wanted to be placed alone and close to the things he loved -the river, the sky, the pine-clad mountains of his home. - Arizona Republic.

Show Low Reservoir Okayed . . .

SHOW LOW—The Arizona game and fish commission has officially okayed building the controversial Long Lake reservoir at Show Low. The \$225,000 bill for the work is to be paid by Phelps Dodge Corporation. The company agreed to furnish the money in return for the right to use 5000 acre-feet of water per year from Show Low creek in its mining operations.—Arizona Republic.

Indian Bill of Rights . . .

PHOENIX — An Indian "bill of rights" demanding from Congress and from states where reservations are located a revision of laws to give equal treatment and privileges to the nation's 400,000 Indian citizens, was presented in November to the National Congress of American Indians at Denver, Colorado. The charter was drafted under the direction of D'Arcy McNickle, director of Arizona's all-Indian conference.—Arizona Republic.

Move Into Pueblo . . .

GLOBE—The Southwest National Monument Service planned to move into the Gila Pueblo building on the Six Shooter Highway in mid-November and establish its permanent head-quarters there. The federal agency, formerly located in Santa Fe, New Mexico, is in charge of all national monuments in Arizona and New Mexico and one each in Utah and Colorado. The Gila Pueblo was established in 1928 by Mr. and Mrs. Harold S. Gladwin of New York as an institution for private archeological research. It is built on the site of the Healy Terrace atop the ruins of a 600-year-old Indian dwelling.—Arizona Republic.

FLAGSTAFF—U. S. Indian Service schools in Arizona, California and Nevada are looking for teachers. Applicants must be graduates of accredited colleges or universities and have had either practice or actual experience in teaching. Information and application forms are available at civil service offices at first and second class post offices.—Coconino Sun.



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MISCELLANEOUS

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- FOR SALE: Relies found by Cleve Park (guns, spurs, etc.). See Desert Magazine (Feb. 1949) page 11, for story and pictures. Best offer. Write Frances Park Claypool, 7348 Templeton Street. San Diego 11, California.

Band to Save Forests . . .

TOMBSTONE — Weldon Heald, Southwestern author, and a number of interested citizens have banded together in an effort to save forests in the Chiricahua Mountains from logging operations. The area in question is presently part of Coronado National Forest and is subject to lumbering operations removing "over-ripe" trees. It is suggested by the group that Chiricahua National Monument be extended to include this portion of the forest.—Tombstone Epitaph.

HOLBROOK—William B. Branch, superintendent of Petrified Forest National Monument, reminds visitors of the change in operating hours during the winter months. Gates will be opened at 8 a.m. and closed at 4:30 p.m. Since the distance between gates is 14 miles, visitors will not be permitted to enter after 4 p.m.

GRAND CANYON—Tourist travel to Grand Canyon National Park continues to break all previous records, according to a report issued by the National Park Service. For the travel year ending September 30, the park was host to 728,000 visitors. This is a six-percent increase of 40,000 persons over last year.—Coconino Sun.

CALIFORNIA

Approve Land Sale . . .

PALM SPRINGS—Sale of valuable resort area lands by members of Palm Springs' Agua Caliente Indians has been approved by the Bureau of Indian Affairs, and a public sale will be conducted in November or December under supervision of the Bureau's Sacramento office.

Study Desert Water Plan . . .

INDIO—"The development of the Coachella Valley area has advanced to the point where a comprehensive coordinated water plan should be evolved," said the Riverside County Flood Control District in a letter requesting the State Water Resources Board to study a plan for water conservation and flood control in the valley's Whitewater River basin. The state board promised to consider making more detailed plans and intensive study of Coachella Valley's water needs.—Indio Date Palm.

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Desert Pioneer Passes . . .

DAGGETT - The Mojave Desert lost its foremost historian and early pioneer when Judge Dix Van Dyke passed away October 10 at the age of 73. A native Californian, born in San Diego, and a resident of Daggett since 1901, Judge Van Dyke succeeded his father, T. S. Van Dyke, as Belleville justice of the peace in 1923.

A thorough historian, he spent more than 30 years chronicling the story of the Mojave Desert, tracing and retracing pioneer trails, rediscovering forgotten camp grounds and water holes used by ox-drawn caravans up to a century ago. His memory and collection of rare books proved valuable to many desert writers and historians.

Besides his historical research, the Judge had written many magazine articles about various phases of desert history, botany and wildlife. He enjoyed debunking popular legends he had proved untrue.-Barstow Printer-Review.

Campaign for Museum . . .

SAN BERNARDINO—The largest county in the United States, San Bernardino County, California, still lacks a county museum. To remedy the situation, a group of citizens representing historical and other organizations have formed the San Bernadino County Museum Association. Its object is "to foster research and education and to create and maintain collections of art, archeology, history and science; to preserve the relics and records of pioneer days and to further a better understanding of science and the arts.' . .

Honor Butterfield Pioneers . .

BORREGO - "Dedicated to the memory of stage drivers and pioneers," a bronze plaque has been placed in front of the 110-year-old Butterfield Stage Station on the San Felipe cutoff route five miles east of Warners Ranch. The memorial, embedded in a base of native quartz and granite, was provided by the Native Daughters and Native Sons of the Golden West. It replaces a painted marker erected in 1930.—Borrego Sun.

To Banish Banning Bottleneck . . .

BANNING - Desert-bound travelers from the Los Angeles metropolitan area will be benefited by a 2.75-mile freeway route to be built through Banning along Highway 60-70-99. Traffic on the present route averages more than 13,000 vehicles per day. The highway both east and west from Banning is already built to four-lane divided standards, but the section through the city has long constituted a serious bottleneck. - Southwest Builder and Contractor.

Litterbugs, Watch Out! . . .

PALM SPRINGS - "The Indians are getting tired of people dumping trash on their lands. Empty reservation land is still private property," Indian Agent Lawrence Odle commented when he announced the new policy adopted by the Agua Caliente Tribal Council against people who are dumping garbage and trash or digging holes on Indian land. Full prosecution will be made as provided under city laws. "The city dump is open every Sunday for people who do not subscribe to the city garbage service,' Odle reminded Palm Springs citizens. —Desert Sun.

Cahuillas First in California? . . .

PALM SPRINGS—There is strong evidence that California man originated approximately 10,000 years ago when great numbers of ancient native populations are believed to have migrated to the New World from northeastern Asia. Dr. Robert F. Heizer, associate professor of anthropology at the University of California, believes that the Cahuilla, Pomo and Yuki Indians of California may be survivors of this ancient migration. Dr. Heizer recently published a detailed study of California man, basing his theories on archeological expeditions, excavations of sites formerly inhabited by ancient native populations and through a study of past climatic conditions. - Hemet News.



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De-Salting Nearly Here . . .

RIVERSIDE — An invention to take the salt out of sea water so that it can irrigate arid lands may be ready to use on a limited scale within a year or two, Herbert U. Nelson, vice-president of the National Association of Real Estate Boards, reported to association members. Much of the desert area in the United States and Mexico has reasonably good access to salt water, Nelson pointed out, and the new device, if proved practical, will open up the possibility of doubling productive land area.—Riverside Enterprise.



Fish Thrive in Salton Sea . . .

MECCA-Since 1948, more than 10,000 ocean, game and forage fish have been planted in Salton Sea. In a recent progress survey, biologists of the California Department of Fish and Game found evidence that some species of introduced fishes are thriving and multiplying. Assistant Fisheries Biologist P, A. Douglas expressed great hope for a future sport fishery here if we can count on continued food supplies of native desert pupfish, mosquito fish, marine worms and plankton."—Coachella Valley Sun.

NEVADA

Fence Ghost Town Cemetery . . .

CALIENTE—The cemetery at the old mining camp of Delamar, Nevada, today is neatly fenced, thanks to the efforts of the Caliente chapter of Odd Fellows. Lincoln county and other lodges joined in the purchase of materials for the fence, and Odd Fellows members did the job one Sunday afternoon. The Catholic cemetery at the ghost town was fenced a number of years ago, and plans for the public graveyard have been pending for some time. There was a Chinese cemetery at Delamar during the camp's heyday, but the bones of those interred there were exhumed and shipped to China a long time ago.—Caliente Herald.

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CALIENTE - More than a thousand banded Gambel quail are loose in Southern Nevada. These birds, trapped, banded and released by Nevada Fish and Game commission technicians, constitute an important part of the current quail restoration project. Hunters who kill quail having aluminum bands on their legs are requested to report the band number, date and locality of the kill to the Reno office of the Fish and Game Commission. Many phases of future management of Nevada's quail resources depend upon a satisfactory return of the banded birds. With sufficient information upon which to base hunt regulations, longer seasons and larger bag limits are quite probable. — Caliente Herald.

Highway 6 Postage Stamp . . .

AUSTIN—Petitions asking issuance of a special commemorative stamp honoring the completion of Highway 6 were circulated recently in Austin and other towns and cities along the transcontinental route. Known as the GAR highway in honor of Union veterans of the Civil War, the roadway extends from Cape Cod, Massachusetts, to Long Beach, California. Celebration of the highway's opening early in October are planned in May, 1953, in the 14 states it crosses. — Reese River Reveille.

Mine Operations Threaten Town . . .

ELY—Kennecott Copper Corporation is preparing to move the mining town of Ruth to a new location, clearing the way for expanded copper production. Underground mining soon will be conducted below Ruth from the new 1700-foot Deep Ruth vertical shaft, a company spokesman explained making it necessary to move the town to a safer site. All the present Ruth location will eventually be destroyed by caving ground when mining is in full operation.

Approximately half the buildings and homes will be moved this year and the rest transferred early in 1953. The company has purchased or located 50 claims north of the old Kevstone dump for the new town.-Pio-

che Record.

Organize for Highway 8-A . . .

TONOPAH—To popularize State Highway 8-A, new north-south route across Nevada, delegates from various communities along the way have organized the Highway 8-A Association. Besides advertising and publicity, the group plans to conduct a campaign for completion of the route westward from Denio to California. The highway has already proved important to trucking and passenger travel.-Humboldt Star.

More

House

BOULDER CITY—Privately owned trailers now can be left for extended periods of time at two locations in the Lake Mead Recreation area under a program recently set up by the National Park Service. Sites are being prepared at Pierce Ferry, near the head of Lake Mead, and at Bonelli Landing, 30 miles east of Boulder City. Full information may be obtained by contacting the superintendent's office at Boulder City.

NEW MEXICO

Hunters Score High Kill . . .

SANTA FE-State Game Department records reveal that antelope hunters in New Mexico scored generally high kill percentages during the first two seasons of the year. In some cases the hunters hit the 100 percent mark before the hunt was 24 hours old and closed the season well ahead of schedule. On the Bell, Waggoner, Arnett and Four-V ranches in eastern San Miguel County, hunters chalked up a 100 percent kill. A perfect hunt also was held by 37 assigned hunters at the T O ranch in Colfax County. In the Roswell area, 298 hunters accounted for 221 antelope and a 74 percent kill, while a low percentage of 55 was recorded on the Turkey Mountain hunt near Watrous. Game wardens and patrolmen supervising the early seasons reported a minimum of violations and misdemeanors.-New Mexican.

Rainmakers Blamed . .

LAS CRUCES-Dr. E. J. Workman, president of New Mexico Institute of Mining and Technology, believes commercial rainmakers may be partly responsible for the drouth which the Southwest has experienced in the last two years. "Increase in commercial rainmaking has been accompanied by the most severe drouth in the history of the Southwest," he noted. Dr. Workman advised ranchers not to base the size of their herds on expected average rainfall, pointing out that average amount of rain does not fall in 50 percent of the years .- Alamogordo News.

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VAN DEGRIFT'S HIKE HUT

717 West Seventh Street LOS ANGELES 14, CALIFORNIA Indians Angered by "Insult" . . .

SANTA FE — The usually calm Pueblo Indians were enraged during Fiesta time in Santa Fe, when a 19year-old white youth appeared in public wearing a sacred Indian costume. Tribal leaders considered the incident a gross insult to ancient Indian religion. The boy, a Harvard student, claimed he had duplicated the mask and costume from memory, after having seen the dance performed at the Hopi village of Walpi, Arizona. Although the Hopis permit the public to view their version of this particular rite, the Pueblo Indians allow no white spectators. The rituals of the two tribes are much alike, and the costume bears a deep sacred significance to both groups. The youth was unaware he was doing anything wrong, and it was believed his apology to the All-Pueblo Council would be accepted. - New Mexican.

New Tourist High . . .

SANTA FE - Out-of-state traffic entering New Mexico has climbed to a new peak. In the first nine months of this year, the State Tourist Bureau estimates 5,067,524 persons, traveling in cars, trucks and buses, crossed the state's lines. For the same period last year, the official estimate was 4,835,-281. On the basis of these figures, Melvin Drake, bureau director, computes the value of the tourist business in New Mexico at \$170,000,000 for the year .- New Mexican.

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SANTA FE-New Mexico Game Department announced that the state's 1952 quail season will be from noon December 12 through December 28. Bag limit will be eight birds per day or in possession and 48 per season. Pheasant season is November 29 to December 1.—New Mexican.

Master Weaver of Chimayo . . .

CHIMAYO-Nicacio Ortega, master weaver of Chimayo, celebrated his 77th birthday in October, bringing to a close his 57th year in the weaving trade. Ortegas have been weaving since the 17th century, and some of the finest Indian rugs and blankets are made by Nicacio and his two sons. Their work has become so popular that the three looms cannot supply the demand. More than 40 families in Chimayo now work for Nicacio, each

TRUE OR FALSE ANSWERS

Questions are on page 24

-False. Carlsbad Caverns are in New Mexico.

-True.

4-False. Chrysocolla comes in cop-

per ore.
-False. Kaibab forest is on the North Rim of Grand Canyon.
-True. 7.—True. 8—True.

True.

-False. Pinyon nuts grow on Pinyon trees.

-False. Bloodstone is green chalcedony with spots of red jasper.

-True.

13-False. Ubehebe has been extinct for hundreds of years.

True. 15—True. False. Bill Williams River flows into the Colorado below Lake Mead.

True. 18—True.

False. There are no antelope in

Death Valley.

-False. Pauline Weaver was a man—a prospector credited with having discovered the La Paz gold placer fields.

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weaver, himself an artist, turning out rugs of brilliant color and superb workmanship. No two are woven with the same design. It is explained that in this way each weaver lets his own heart speak.—New Mexican.

UTAH

Zion, Bryce Open all Year . . .

ST. GEORGE—With the opening of the 1953 travel season October 1, Paul R. Franke, superintendent of Zion and Bryce National Parks, urged more

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people to visit the beautiful natural wonderlands during the fall, winter and spring months. Every effort is made by the National Park Service to keep some of the roads open at Bryce Canyon all winter long, so that visitors may enjoy the brightly colored canyons inlaid with strata of pure white snow, "Zion is always readily accessible," reports Franke, "and the area is spectacular in autumn foliage or winter snows." While the lodges within the parks are closed until May 15. tourists will find accommodations in the towns and cities of Southern Utah, he added.—Washington County News.

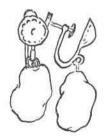
Bids Near Half Million . . .

FT. DUCHESNE - Uintah and Ouray Indian tribes in October offered the largest single piece of their lands for lease by oil and gas operators. Bonus bids, in action dominated by joint bidding of three large oil companies, totaled \$409,093.92. With the new lease, the firms, Carter Oil Company, Stanolind Oil and Gas Company and Phillips Petroleum Company, gained control of 20,587 acres cutting through the important Hill Creek oil and gas prospect in Southern Uintah County. All three producers already have substantial interests in the area. —Vernal Express.

Landmark Groups Organize . . .

SALT LAKE CITY—To preserve the pioneer heritage of Utah, seven organizations have formed a central committee whose objective will be the maintenance and preservation of historical landmarks and areas throughout the state. Immediate concern of the group, according to John D. Giles, temporary chairman, will be to prevent sales of such historical areas as Pioneer Park, Ensign Flat and the old City Hall.—Salt Lake Tribune.





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Last Doctor Called . . .

MONTICELLO—San Juan County residents are hoping against hope that no one gets sick. On November 1, the second of the county's two physicians was scheduled to enter the armed forces, leaving Utah's largest county in area, with more than 3000 people. without medical care. Dr. J. R. Matheson of Blanding re-entered the U.S. Air Force Medical Corps October 1. and Dr. Don B. McAffee of Monticello was called into the Navy Medical Corps, to report for duty November 1. Dr. Eliot Snow of Salt Lake City, chairman of the advisory committee to Selective Service on physicians and dentists, said that both these physicians left their San Juan County practices voluntarily and neither had consulted his group on the possibility of deferment. "We would have protected them if they had," he added. "because we realize the seriousness of the situation there." Both Blanding and Monticello have set up community plans under which doctors are provided with offices and guaranteed a minimum annual income. Monticello has a 12-bed hospital with three registered and two practical nurses.—Sali Lake Tribune.

To Study Rain-Making . . .

SALT LAKE CITY—An organization of Southern Utah farmers has given the University of Utah an initial sum of \$3600 to begin research on a long-term project to determine the efficiency of rain-making by seeding clouds with silver iodide. The research, to be conducted under the direction of Prof. J. Vern Hales, will investigate current methods of evaluating cloud seeding efficiency and may develop new or combination methods. Annual budget for the project, expected to extend over several years, is \$10,000.

—Salt Lake Tribune.

War on Porcupines . . .

VERNAL — Porcupine populations in Utah forests are increasing in spite of reduction programs, and hunters in certain areas are being asked to shoot them on sight. The Forest Service recognizes that the quilled rodents are a natural part of the forest habitat, but an overpopulation can do serious damage to future timber supplies and destroy recreational and scenic values of forests by stripping the bark from thousands of young trees.

thousands of young trees.

"Aim for the head," the Forest Service advises and adds, "it's usually the end farthest from the tree trunk. Use the same safety you would when shooting game." Porcupines are often seen at sundown in or near mountain roads, grassy meadows and stream-

banks.—Vernal Express.

Mines and Mining

Carson City, Nevada . . .

An ore body assaying high in gold, silver and lead values was cut recently by an inclined shaft down only 40 feet at property of Fowler Mining Corporation in California just across the state line from Esmeralda County, Nevada. The vein is reported to measure four feet wide, with promise of holding at depth. Work is being accelerated following the strike.—Humboldt Star.

Wenden, Arizona . . .

The federal government's \$100,000 manganese depot and sampling plant near Wenden is expected to be in operation by January 1, according to C. E. Myers, U. S. engineer in charge of construction. Myers said one supplier under Defense Materials Procurement Agency contract has 300 tons of manganese ready for delivery to the plant. Other suppliers in the Artillery Peaks district of Mohave County and in northern Yuma County have unlisted quantities of stockpiled ore.—Arizona Republic.

Elko, Nevada . . .

Several million dollars were believed involved when Culp and Summers, Oregon mining operators, signed a lease and option on tungsten property on Tennessee Mountain in the Alder mining district east of Mountain City. Owners and developers are Knowles Brothers and Price Montgomery. The lessees already have moved heavy equipment onto the property and have started building roads, leveling campsites and preparing the mill site. The mill is expected to be in operation by next summer.—Territorial Enterprise.

Reno, Nevada . . .

Iron mining has become one of Nevada's leading industries. Vast deposits of high grade iron ore, known but neglected for decades, were first mined in 1951 when Japanese steel companies, barred from former sources of supply in Manchuria and Korea, became eager buyers of the Nevada product. Approximately a dozen operators now are shipping ore regularly to Japan, and production this year is expected to be close to 2,000,000 tons. Iron mines are active in the Elko, Battle Mountain, Lovelock, Coaldale, Gabbs Valley and other areas. Development of properties in other fields has been undertaken recently .-- Mining Record.

Tonopah, Nevada . . .

With almost 200 feet of the rich Summit King ore body now explored at the 300 foot level, it is obvious that a major mining operation is in the making. From the point of entry, the vein has now been probed 130 feet to the west and 67 feet east-and the ore still is holding in both directions. Sufficient progress has been made to assure the construction of a new main working shaft, probably with three compartments, and the erection of a mill. Work on these major projects will be deferred until spring, but underground development will continue. The heart of the vein stretches across 110 feet, averaging a good four to five feet in width with high values.-Tonopah Times-Bonanza.

Virginia City, Nevada . . .

H. H. Scheeline, owner of practically everything in sight of the old mining camp of Rawhide, Nevada, has announced plans to begin open pit mining operations in the area and to construct a 5000-ton mill. Rawhide made a noisy entrance into the mining world about 1905, but, in spite of the efforts of its self-appointed press agent, Tex Rickard, ore bodies soon pinched out and the town died.—*Pioche Record*.

Moapa, Nevada . . .

Development of mica property a few miles southeast of Moapa is planned by Taglo Mining Company of San Francisco. According to local sources, there is a sufficient deposit in the area to operate profitably for at least five years. The developers plan to install a million-dollar plant to mine, mill and cut the strategic non-metallic. —Las Vegas Review-Journal.

Randsburg, California . . .

Mrs. Kathleen Jewell of Randsburg is reaping unexpected return from an investment she made ten years ago. In 1942 Mrs. Jewell purchased the old Billie Burke Mine because she felt the small houses built on the claim had rental value. The mine itself she leased to two part-time miners. Now the miners have discovered a good vein of scheelite, tungsten ore, assaying about 64 percent concentrate, and Mrs. Jewell estimates her royalties for this year will top \$1000. — Randsburg Times-Herald.

Salt Lake City, Utah . . .

Can the owner of a mining claim on federal land lease the surface of his claim land for grazing purposes? This question was expected to be answered by a test case filed recently in the U. S. District Court in Denver, Colorado. The suit was filed against two prominent Western slope sheep ranchers, Paul and John Etcheverry, charging that they have trespassed in allowing 800 sheep to graze on an estimated 4000 acres of land, partly unpatented mining claims. The sheepmen claim they obtained grazing leases for the surface of some of this land from persons who hold mining claims on it. The suit was filed to determine whether this could be done.—Humboldt Star.

Prescott, Arizona . . .

The old King Divide Mine, 17 miles southeast of Prescott, has received a new lease on life. Renamed the Mount Union Mine, new development was begun in October, 1950. The old mine workings were tapped at the 500 foot level by a 1200-foot tunnel which drained the mine to the 50 foot level and cut two veins at 500 feet. These veins have been drifted on for some distance and ore shoots for 100 feet have been exposed. The veins are two to four feet in width and carry commercial quantities of lead and zinc besides appreciable gold and some silver values. A 50-ton-per-day selective lead-zinc flotation plant is planned on the site.—Arizona Republic.

LEGAL GUIDE HELPFUL TO PROSPECTORS, MINERS

"How do I file a mining claim? How long is it good? What laws protect me as a prospector, and what rules must I follow?"

Questions like these are constantly being directed to the California Division of Mines office in San Francisco. To provide answers, L. A. Norman, Jr., supervising mining geologist with the division, has prepared a *Legal Guide for California Prospectors and Miners*. The booklet is distributed by the Division of Mines through its Mineral Information Service.

The guide — and Norman stresses the fact that it is only a guide, specific legal problems to be referred to an attorney — includes general information about mineral patents, manner of locating and holding claims in California, ore-buyers' licenses, California safety regulations, mining claims in national forests, appropriation of water and federal gold regulations.

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Imateur Gem Cutter

By LELANDE QUICK, Editor of The Lapidary Journal

We have just returned from an 8200 mile trip through 28 states, a trip that took us through all the New England states with their brilliant October foliage and through all the Southern states except Florida. We had the great pleasure of speaking to the meeting of the Eastern Federation of Mineralogical and Lapidary Societies at Newark. New Jersey, and to the largest mineral club in America, the Georgia Mineral Society at Atlanta. At the latter place we had the great satisfaction of having "Uncle" Billy Pitts in our audience. He is known in every corner of America as "dean of the lapi-daries" for he has supplied most of the important museums in the U.S. with a lapidary exhibit of American gem cabo-chons. Now well up in the eighties he had stopped by Atlanta, his old home, to pay a visit while on his way from San Francisco to his annual wintering near Mlami-the only Californian known to us who spends the winter in Florida.

At Greenville, South Carolina, we spent a wonderful day with J. Harry Howard, author of the first book for the amateur lapidary and still a leading seller-Revised Lapidary Handbook. Here we experienced southern hospitality with all that the words imply—a truly gracious time offered the Quicks by the Howards.

The important thing to readers of this page is that we had a grand opportunity to study at first hand the development of America's third largest hobby in the East. It is just about at the point where the West was 15 years ago. We visited the Oxford County gem localities in Maine and saw the masses of new and almost flawless rose quartz recently mined by Stanley Perham at West Paris-every piece with a star and probably the best gem rose quartz ever found. We saw the high quality work at the Newark show, which was the best show the east has ever had and which drew a paid attendance about six times larger than last year's show at Washington.

We acted as a judge, along with Dr. Fred Pough, of the lapidary exhibits. These were of a high order indeed but they were predominantly faceted gems and jewelry The jewelcraft averaged better than work. most of the western shows for there are infinitely more people following the silvercraft hobby in the East than in the West for the reason that almost every community has jewelcraft in its school program.

Some odd things that impressed us because of their lack was the fact that not one piece of petrified wood was exhibited by anyone and that the eastern folks do not seem to understand what the term "flats' means. There were two exhibits entered in the "flat" class. One was just a dozen or so baroque pebbles and the other was a half of a nodule. These exhibits were dis-qualified. There were few agates. When we arrived at Georgia our host said "a fellow from California came through here a few months ago with the back of his car loaded down with agate. He not only couldn't sell it; he couldn't give it away. No one around here wants any agate." The lapidary hobby without petrified wood and agate is like a cabbage with no ham. The folks back East cut what they have available of course-unakite, williamsite, jasper, etc.

and the westerners should examine some of the East's materials too for they greatly improve any cabochon collection.

The big problem in the lapidary hobby in the East still prevails - the apartment dweller. We visited friends in East Orange, New Jersey, for a week. They live in a large apartment in one of the best apartment houses in their town-an apartment that never sees a ray of sunshine enter any window-an apartment in which the lights must be turned on during the brightest days if you wish to read or see anything. Our host is a new rockhound and he had just received a new Hillquist Gemmaster, Apartment rentals in the East are usually based on a square footage basis rather than a per room basis. Few renters therefore have any more space than they really need. The apartment dweller (we were one for many years) must exercise great ingenuity to hide the vacuum cleaner and the golf bag but he has to be a genius to find the space for a lapidary outfit. He is faced with the problem of not being allowed to make any noise and he can't mess up a place like the old garage.

We brought this matter to the attention of several equipment manufacturers about three years ago when we visited the East. The result was that there are now on the market several good outfits designed with the apartment dweller in mind; several outfits that are between the toy stage and a one-man band type of equipment. All manufacturers of such equipment report very satisfactory sales. But these outfits at best only allow the production of a few cabochons and faceted stones. The cliff dweller is sunk when it comes to enlarging his craft field.

Upon our return we find an interesting letter from a new manufacturer in Chicago who is aware of the problem, for Chicago too is a great apartment area. He writes -"I am convinced that the practical apartment-type unit is the answer to developing this market's apparent potential, and happy to say that the six years of intensive me-chanical research I and a dozen other mechanical engineers scattered through the industry have invested in the subject are about to produce. My plan is to reach the going nuts, have got to have something mechanical to do at home. They live in apartments and have been able to find nothing but candid photography that would agree with their environment.

"If we can get the hobby into an apartment your troubles as a publisher are going to be over. The record in Chicago shows that apartment dwellers flock to our Parks District courses in cutting and then fade out when they can't continue work at home.

Our correspondent says much more of course and we wish him well with his efforts. But if any reader is an apartment dweller and has enough room for a mixmaster or a portable radio that isn't in use just send us a stamp and we'll tell you about five makes of apartment machines that are available now and not merely on the drawing boards. We think the biggest problem is the development of an outfit that doesn't require a quarter horsepower motor for the motor is half the size of the outfit.

Gems and Minerals

METEORITE FRAGMENTS LAND NEAR HAVASU CANYON

Rockhounds and amateur geologists will have a hard time identifying with anything terrestrial some strange gray rocks they might pick up in the vicinity of Havasu Canyon, Arizona. The stones come from

outer space.

They are fragments left by the brilliant They are fragments left by the brilliant meteorite which flashed over Southwest skies late in August, explained Dr. H. H. Ninninger, curator of the American Meteorite Museum near Winslow, Arizona. Through information supplied by persons who saw the tailed fireballs, Dr. Ninninger has determined their approximate landing point.

"The meteor's behavior was like that of a stony meteor." he said, "The color was normal, described by most observers as white or pale bluish. The final flash occurred at a height of several miles and gave forth a shower of sparks (fragments), three of which were large, and continued glowing until well on their way to the earth.

"The region where the fragments probably came to earth is southwest from Havasu Canyon and northeast from Seligman. They probably are scattered over an area 5 or 6 miles across and may be of any size from small gravel to several hundred

pounds."

The Meteorite Museum requests that strange looking rocks found in the area be sent in for testing. Dr. Ninninger indicated the museum would pay for meteorites of any size. The type of stone to be looked for is gray and granular, covered with a thin, black or scaly crust. Some meteorites, however, are black throughout, the scientist pointed out, and some are almost white with a gray or brownish cast. - Arizona Republic.

BIBLE DESCRIBES GEMS IN AARON'S BREASTPLATE

The breastplate of judgment worn by Aaron and described in the Bible formed topic matter for J. E. Farr, president of the Earth Science Club of Northern Illinois, when he spoke at a meeting of the Chicago Rocks and Minerals Society. Farr first out-lined the history of the Israelites to the time of Moses and Aaron his high priest. He then described the 12 gems set in the breastplate of judgment.

The first stone was called sardius and is believed to have been either a ruby or a believed to have been either a ruby or a carnelian. The second probably was a peridot, although it was called topaz, after Topazos, an island in the Red Sea where it was found. Carbuncle, the third, we know as garnet; the fourth was emerald, the dark green variety of beryl. Another variety, probably aquamarine, was the tenth stone.

stone.

Number five was called sapphire, but instead of corundum may have been lapis lazuli. The Bible names diamond as number six. The seventh was ligure, probably what we know as zircon, the crystals of which usually are brown but change color when heated.

Agate was the eighth, amethyst the ninth, onyx the eleventh and jasper the last of the 12 gems, each of which represented one of the 12 tribes of Israel. Farr exhibited rough and polished specimens of each stone.

COAST SOCIETY SETS FIFTH GEM AND MINERAL SHOW

February 21 and 22 are dates selected by San Pedro Lapidary Society for its fifth annual gem and mineral show. Exhibits will be arranged in the San Pedro Boys' Clubhouse, 778 13th Street, San Pedro, California. Doors will be open from 11 a.m. to 10 p.m. Saturday, from 10 a.m. to 6 p.m. Sunday.

Some of the special displays that have been promised are cut stones by the Gem Cutters Guild, the Ohlsens' Death Valley onyx collection, sea shells from all over the world, fluorescent exhibits, jade carvings and spheres. Films on cutting and polishing gemstones and projected transparencies also are scheduled.

. . FEDERATIONS' BULLETIN RESUMES PUBLICATION

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Publication of the Earth Science Digest, official magazine of both the Midwest Federation of Mineralogical Societies and the Eastern Federation of Mineralogical and Lapidary Societies has been resumed. The Digest is devoted to the dissemination of geologic information and to the promotion of the teaching of the earth sciences, especially in the nation's secondary schools.

Walt Bilicke, member of the Engineer's Syndicate and an authority on radioactive minerals, promised to bring his collection of rare earth specimens for display at the October meeting of Southwest Mineralogists, Los Angeles.

BRITISH GEMOLOGISTS ANNOUNCE NEW SYNTHETIC

A British gemologist magazine reports that a new synthetic material, almost as clear as a diamond although with a slight tinge of yellow, will be on the market soon. The new gem will have the properties of synthetic rutile, "but it is not rutile," the magazine states. It will be known as strontium titanite.

Dusty Rhodes demonstrated ultra-violet lights and fluorescence at the first post-show meeting of Compton Gem and Mineral Club, Compton, California.

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- FOR SALE: Beautiful purple Petrified Wood with Uranium, Pyrolusite, Manganite. Nice sample \$1.00. Postage. Maggie Baker, Rt. 1, Box 284, Blythe, California.
- OREGON THUNDER EGGS, mixture of Crook County, Harney County and Wasco County. Reds, greens, blues, good matrix. Our first year's selling after seven years' mining. 10 lbs. \$7.50 post paid. Ruth's Agate Mining, 10344 S.E. Sherman Avenue, Milwaukie, Oregon.
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- STOP-LOOK-BUY-Specimens, slabsrough, from A. L. Jarvis, 1051 Salinas Road, Watsonville, California. On Salinas Highway, State No. 1, 3 miles South of Watsonville.
- 105 DIFFERENT Mineral Specimens \$4.50. Carefully selected. Makes a valuable aid in helping identify and classify your findings or makes a wonderful gift. Boxed and labeled. 70 different \$3.00, 35 different \$1.50. Add postage. Coast Gems and Minerals, 11669 Ferris Road, El Monte, California.
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- BERYL CRYSTALS, Columbite, Tantalite, Purpurite, Andalusite Crystals, Rose Quartz, Hell's Canyon Agates. Mac-Mich Minerals Co., Custer, So. Dakota.
- "DON'T MISS" Fine rough gems, Minerals, Silver and Lapidary supplies at Superior Gems & Minerals, 4665 Park Blvd. San Diego 16, California. (Sorry, no lists.)
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- ROCK COLLECTORS ATTENTION: Both Trailer Rock Stores are again open for business, full of quality merchandise. On Highway one-eleven between Palm Springs and Palm Desert, Crystalized minerals a specialty! The Rockologist (Chuckawalla Slim), Box 181 Cathedral City, California.
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- GEMS AND MINERALS, collecting, gemcutting. Illustrated magazine tells how, where to collect and buy, many dealer advertisements. Completely covers the hobby. The rockhound's own magazine for only \$2.00 year (12 full issues) or write for brochure and booklist. Mineral Notes and News, Box 716A, Palmdale, California.
- YES THERE IS a Rockhound in the City of Porterville, California. At 1120 Third Street.
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- BEAUTIFUL FREE GOLD specimens \$1.00 each, postpaid and returnable if not satisfied. J. N. Reed. Bouse, Arizona.

AMONG THE

ROCK HUNTERS

"More and more lapidaries are making jewelry from fluorescent materials," reports Gritzner's Geode. Sweetwater agates, com-mon opal from Nevada, fluorite, agate and chalcedony from Arizona, benitoite, diamonds, sapphires and kunzite all may have brilliant fluorescence. Though softer than these, Franklin, N. J. fluorescent materials are beautiful in cabochons and will polish. . .

Fossils, jasper and chert are found in the Jacalitos Hills near Fresno, California. Fresno Gem and Mineral Society planned an October trip to the area to search for good specimens. November 29-30, when tides are most favorable, the group plans a weekend outing to Jade Cove to gather jade from the sea.

0 Geodes in abundance were found by Earth Science Club of Northern Illinois members on a recent field trip to the Dicksons' Mound area. "The best to the Dicksons' Mound area." sons' Mound area. "The best theory so far regarding the origin of geodes is that they were originally membranoceous sacks or spheres," the geode hunters were told. "Saturated solutions of minerals were concentrated in the interiors through the process of osmosis." The Dicksons' Mound, with of osmosis." The Dicksons' Mound, with 230 skeletons as they were buried, reveals many facts about the middle phase of the Mississippi Culture. In addition to the information given by guides, D. J. Wenner, Jr., told his fellow members of the cultures that existed in this and neighboring regions. He also guided the group to the hill where the village was located and to various other mounds in the area. Some ESCONI members later visited the excavation at Maple Mills, the strip mines nearby and the Wheeler Museum of Indian Artifacts.

- HERKIMER QUARTZ CRYSTALS, Beautifully double terminated clear and beautifully formed. 14" length 3 for \$1.00. 1/2" length 2 for \$1.00. Excellent quality. Marlyn L. Fahs, R.D. 5 York, Penna,
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- OAK CREEK CANYON, ARIZONA. At Sedona near Flagstaff and Jerome in Technicolor country, visit the Randolph Shop for specimens and fluorescents.
- CHRISTMAS SPECIAL: Colorful Nevada Fire Opal (Humboldt County), 1/2" \$1.00, postpaid. Frey Minerals, Box 1. Eureka, Nevada.
- QUARTZ CRYSTALS, 1/2" to 1" specimen grade 3 for 50c. Also high grade cutting material 75c per ounce. Marlyn L. Fahs, R.D. 5, York, Pennsylvania.

NAVAJO SANDSTONE MAIN ZION FORMATION

Navajo sandstone is the most important formation in Zion Canyon. It constitutes the massive block from which have been carved the canyon walls and the towers, spires and temples of this natural wonderland. W. Scott Lawie and temples of the satural wonderland. land. W. Scott Lewis, naturalist-photographer, visited the area on a summer vacation trip, and he writes about its geology in his October-November Nature Bulletin.

The outstanding feature of Zion Canyon

sandstone, Lewis points out, is the bedding, which is quite unlike that of ordinary sedi mentary rock. It is built up of layers of all shapes and in all positions, many of them curved and some-as in Refrigerator Canyon-bent almost in complete circles. Cross bedding is common and has led geologists to believe that the formation consists of

hardened sand dunes.

The lower part of the sandstone is red, the upper portion white, the coloring mat-ter being hematite and turgite. The mass is essentially a fine-grained, friable quartz sandstone held together by calcareous cement. The sandstone is very porous and is able to hold a large amount of water. The moisture gradually seeps out forming springs and little waterfalls. In some places the cliffs are wet on the surface and covered with masses of Venus Hair fern and brilliant flowers such as lobelia splendens. The seeping water has dissolved the limestone cement in places, forming beautiful natural arches.

Opal was the October gemstone of the month for Chicago Rocks and Minerals Society. The Society's bulletin, Pick and Dop Stick, outlined the character and sources of the gem, and members were asked to bring their opal specimens for that month's display tables.

After hunting minerals at Pala, California, members of San Fernando Valley Mineral and Gem Society traveled on to Borrego for the Annual Pegleg Smith Gold Trek and Liars Contest.

Kilbourne Hole was visited by Dona Ana County Rockhound Club, Las Cruces, New Mexico, on a recent field trip outing. Once a favorite collecting area, the Hole has now been almost depleted of its fine peridote and dunite bombs by selfish persons who hauled away specimens by the truckload for sale in the east, members report.

"Opal Mountain has a wide range of mineral material," reported Editor Ed Flutot in Delvings, monthly bulletin of Delvers Gem and Mineral Society, Downey, California. "Most plentiful are jasper and jaspagate, found in quantity on a rimrock near the peak. Not far from the Mountain is a large field of honey opal, and milky opal also is available nearby." With such a good advance report to cheer them, Delvers members looked forward to their field trip outbers looked forward to their field trip outing October 25 and 26.

Don Wills, vice-president of Castro Val-ley Mineral and Gem Society, led a group of 20 field trippers into Hot Sulphur Creek Canyon, there to search the stream banks for jasper. Fine specimens were found in excellent colors and patterns.

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Hunting quartz crystals is hard work, members of Oklahoma Mineral and Gem Society discovered on a field trip to the Ouachita Mountains in McCurtain County, southeastern Oklahoma. The specimens were difficult to extract from the hard earth, and the broken crystal fragments frequently cut the digger's fingers. But those who joined the overnight trek had a good time and came back with many fine pieces. Some of the crystals were milky white; others were perfectly clear and many contained phantoms or inclusions of epidote or man-

"Nothing," members of Humboldt Gem and Mineral Society were forced to answer when asked what they found on the club's Trinity River field trip. But they had an interesting day and visited some of the small mines of the district.

Grieger's 1952 Catalogue includes many gem-cutting tips for the amateur lapidary. "How to Prevent and Correct Lapidary Troubles," "How to Use Diamond Saw Blades," and suggestions for cutting special forms and caring for machinery are given in addition to a complete illustrated listing of gem material and equipment.

. . San Antonio Rock and Lapidary Society presented the crippled children at Gonzales hospital with a trim saw and are keeping handicapped youngsters well supplied with cutting material.

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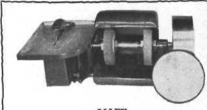
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Junior members of Coachella Valley Mineral Society cook their own meals and make their own camp on field trip outings under the direction of senior members George Smith and Jessie Hamner. Monthly study groups also are a part of junior club

Nine cars joined the field trip motorcade of Long Beach Mineral and Gem Society to visit Mesa Grande and search for tourmaline

To celebrate its 12th anniversary, the Tacoma Agate Club planned a dinner celebration for November 6. Guest speakers invited for the evening program were John W. Jones, assistant seismologist at the University of Washington, and Dr. W. L. Strunk, professor at Pacific Lutheran College. Jones elected to speak on earthquakes and general geology; Dr. Strunk on "Minerals and their Effect on World Affairs."



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Quartz, limonite and calcite crystals were found on Searles Lake Gem and Mineral Society's field trip to Crystal Peak. On a later outing, the group visited Horse Canyon to search for agate.

Gold, the King of the Metals was the title of a color movie projected recently for Tucson Gem and Mineral Society. The film was shown by E. W. Dean, the photographer, assisted by Arthur W. Frautnick.

0 Lorin Rogers brought a polariscope and two refractometers to a meeting of the Gem Cutters Guild, Los Angeles, to help him explain the methods and materials of gem identification. Afterwards, Howard Boblet discussed jewelry making and casting.

An hour-long color and sound film, Hidden Treasures, was shown at the October meeting of Santa Monica Gemological Society. Moody Institute of Science, which provided the movie, invited society members to visit its laboratories in West Los Angeles.

Ed Danner entertained fellow members of the Mineralogical Society of Southern California by relating experiences of a recent trip through Switzerland. He showed colored slides to illustrate his talk.

Palo Alto Geology Society began its third year in October with an illustrated talk on glacial geology by William Crane Bradley. After the program, new officers were installed: James R. Morgan, president; Jerry Newcomer, vice-president; Mrs. Marjorie Stevens, secretary-treasurer; Mrs. David Hendrickson, historian. Program chairman for the year is Charlotte Matthews, and Manuel Šantos is field trip director.

The first winter session of San Diego Lapidary Society's gemology class, taught by Gemologist Charles Parsons, was held October 13. Only members with some background in the structure and methods of gem identification are qualified to enroll. Beginners learn theory in Jeanne Martin's first-year class then graduate to Parsons' class where they get actual laboratory experience.

"For best results with iris agate, cut slices as thin as 1/16 inch and sand and polish as you would for cabochons," Erna Clark advised members of the Los Angeles Lapidary Society. Agates with iris usually do not come in matrix; they either have crystal quartz centers or are hollow and quartz-lined with chalcedony bands around the edges.

Already 100 strong, the recently-organized Gem and Mineral Society of Wichita. Kansas, was invited to join the Oklahoma Gem and Mineral Society at a picnic lunch and get-together at the home of Mr. and Mrs. Ned Kennedy. At the regular meeting scheduled later in the month, further contributions were to be made to the quartz family tree, and a motion picture, The Story of Silver was to be shown.

A trip to Mule Canyon in the Calico Mountains near Barstow, California, was planned for October by the Pasadena Lapidary Society. Members hoped to find good cutting specimens of petrified palm wood.

Members of the Mineralogical Society of Southern California joined a geology field trip group from Pasadena City College to visit Trona, California. Stops were made Saturday for geological talks at Palmdale and Mojave, for specimen collecting at Cinco (feldspar) and Red Rock Canyon (zeolite). Sunday was spent searching for Searles Lake minerals.

Although a date has not yet been set, plans are already in full swing for the 1953 convention of the Midwest Federation of Mineralogical and Geological Societies, to be held at St. Louis University in St. Louis, Missouri, St. Louis Mineral and Gem Society will be hosts, with Kenneth E. Gib-bons as general chairman. Elmer Headlec is president of the sponsoring society.

First Fall meeting of the Oklahoma Junior Mineral and Gem Society was held at the home of Mike and Anne Lynch. Following a weiner roast, specimens of quartz found by members of the senior group on a recent field trip were shown and discussed. and samples distributed among the youngsters. A field trip is planned to the Cooperton area.

Arlo and Juanita Lesley won top honors at Compton Gem and Mineral Club's 1952 show. Their prize for the best piece in the show was a silver necklace cast from living flowers and set with amethysts.

Fil Turner, geologist, civil and mining engineer, discussed earth formations and fundamentals of rock collecting at a recent meeting of the Tucson Hughes Rock Club.

Short biographies of society officers are being given by the Southwest Mineralogist's bulletin editor. Called "Know Your Officers," the feature appears monthly.

"Minerals Used for Gems and Ornaments" was the topic of an illustrated lec-ture presented to Wasatch Gem Society members recently.

Pictures taken by members on a summer group trip to Grand Canyon were shown at the first fall meeting of Coachella Valley Mineral Society, Indio, California.

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SHASTA KING MINE

SUBJECT OF REPORT
Shasta King Mine of the West Shasta copper-zinc district near Redding, California, was operated from 1902 to 1909 and again in 1918 and 1919. During these periods 83,889 tons of ore were mined.

Geology of the Shasta King Mine is the subject of Special Report No. 16 issued by the California Division of Mines. County

the California Division of Mines. Co-authors are A. R. Kinkle, Jr., and Wayne E. Hall, who earlier wrote a detailed paper on

Published with photographs, diagrams and maps, the II-page report is available for 50 cents from the California Division of Mines, Ferry Building, San Francisco. California.

A guided tour of Pine Flat Dam and the surrounding countryside was planned for October by Sequoia Mineral Society. Guide was Hiram B. Wood, engineering geologist.

Each member of Northern California Mineral Society was asked to bring his fa-vorite "bragging piece" and tell about it at a recent meeting in San Francisco.

Mrs. Jessie Hardman, past president of Long Beach Mineral and Gem Society, talked about jade when she appeared as guest speaker at a general meeting of San Diego Mineral and Gem Society. She displayed pieces from her fine collection.

Mrs. Gladys Babson Hannaford, U. S. representative of the De Beers diamond syndicate, has spent considerable time in West and South Africa and is familiar with all phases of the diamond industry. She told members of Minnesota Mineral Club

Dee Dietrich and Peg Pegram scouted mineral fields near Deadmans Lake in the Twentynine Palms area for a future trip by San Diego Lapidary Society. "But the road can be traveled only by a jeep," the two reported. However, the excellent agate cut-ting material found is worth the trouble it takes to reach the choicest spot.

Mrs. Carl E. Woods' talk, "Rock Hunting in the Chuckawalla Mountains," inspired 17 members of Hollywood Lapidary Society to take a field trip to the sites she described.

Mrs, Charlotte Harring is an amateur lapidary who specializes in buttons. She displayed her work when she spoke at a recent meeting of the Yuma Gern and Mineral Society. Included in the collection were agate buttons of many colors, a set of black and white obsidian buttons and some of highly polished palm root. "It is painstaking work," Mrs. Harring reported, and added that her maximum output in one day is only 8 buttons.

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"Crinoid fossils are not plants, as they seem to be," points out the Voice of the El Paso Rockhounds, "but strange and primitive animals which look exactly like growing flowers or plants on the bottom of warm and shallow seas." Crinoids have survived the changing conditions in the world and continue to grow in present ocean waters which are not too warm and where currents are not too disturbing, the bulletin adds. The skeletons of the dead cr.noids have been fossilized and preserved in limestone which nearly always is deposited where oceans once existed.

George Burnham of Monrovia, California, traveled seven months in Africa, collecting mineral specimens, gathering information and taking photographs. He told Sacra-mento Mineral Society about his trip and showed some of the colored slides he had

John B. Jago, San Francisco attorney and amateur mineral collector, covered four continents on a recent collecting trip. "Newfoundland and Iceland were most interesting mineralogically and geologically," he re-ported to members of the Gem and Mineral Society of San Mateo County, California. Southern Norway also was rich in specimens, the traveler found, having good pegmatite and magnetite deposits. From the Belgian Congo he brought home rare specimens of uranium and dioptase. Colored slides illustrated the talk.

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In the October issue of Pebbles, Everett Rock and Gem Club bulletin, Al Dougherty directs fellow members to the best erty directs fellow members to the best artifact hunting areas along the Columbia River in Oregon. Some good sites are found near Bonneville Dam, Dougherty reports, and one mile west of the dam is Hamilton Island, scene of a bloody Indian war about 1861, which has produced points of many sizes. Immediately upstream and directly below the dam the bank has eroded, exposing a variety of points. Old Vakima exposing a variety of points. Old Yakima campsites and burial grounds are found throughout the Columbia and Klickitat river area, Dougherty said.

Walt Chamberlain, Pasadena speleologist and member of the American Speleological Society, told members of Delvers Gem and Mineral Society, Downey, California, about cave explorations. He showed slides taken inside various caves, pointing out geological formations and mineral specimens.

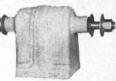
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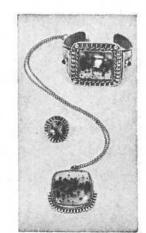




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FIFTEENTH VOLUME INDEX

JANUARY TO DECEMBER 1952

A

A	
Abbott, Mary Ogden Oct	25
A animaltuna San and 32 Name	-20
Agriculture Sep pp29, 32; Nov	p30
Aguereberry, Pete Jul	p42
Aguereberry, Pete Jul Aguereberry Point, Death Valley Jul	p42
Abkeab Sam Oct pp.13	15
Ahkeah, Sam Oct pp13, Albanes, Eugene Jul p5; Nov	-11
Atomies, Eugene Jul p., Nov	pii
Albright, Horace Aug pp:	5. 8
Alchesay, Chief Baha Dec	p25
All-American Canal	
Mar p30; May p30; Jul	n32
Allen Norten (Clare wer) Mar	n 12
Allen, Norton (Close-ups) Mar	p43
Amateur Gem Cutter	
By Lelande Quick each is Andreas Canyon, Calif. Jun p19; Nov	ssue
Andreas Canyon, Calif. Jun p19; Nov	p30
Andreas, John Joseph Jun	p20
Animal life—	Par
Bighorn sheep May p32, Jun p21,	Can
bignorn sheep may p32, Jun p21,	sep
p17; Buffalo Feb p29, Nov p27; Bu	FFOS
Oct p17, Dec p21; Choati-mundi Sep p Coyotes Nov p21; Deer Apr p34, Jul p	20;
Covotes Nov p21: Deer Apr p34, Jul r	29:
Elk Sep p29; Jackrabbits May p31; Me	and.
ow mice Jan p2; Mountain lions Oct p	529;
Porcupines Dec p30; Sheep Apr p33, M	May
Porcupines Dec p30; Sheep Apr p33, App p25, 30; Wild horses Aug p34; Wild	llife
Apr p43	
Animals, prehistoric—	
Ammais, premisione—	0
Dinosaur Mar p12; Ground Sloth	Sep
p12; Sabre-toothed cat Sep p13	
Archeology Jan p8: Mar pp23, 31, 34;	Apr
p18; May pp30, 43; Jun p22; Jul p	n39.
A. = ==10 25. Car =11. Oat ==20	22.
Aug pp10, 35; Sep p11; Oct pp20,	20.
Nov. p21	
Architecture Sep p4; Nov	p9
Arizona Desert Botanical & Zoological	
Gardens, Tueson Apr p27; May	200
Approximation Appropriate Appropriate Approximation Approx	214
Arrastres Apr	D14
Arrastres Apr Arrowheads Mar p23; May p24; Sep Arroyo Salada, Calif. Mar Art May p8; Jul p12; Aug p14; Oct. p	p12
Arroyo Salada, Calif. Mar	p21
Art May p8: Jul p12: Aug p14: Oct. p	p42.
43; Nov. p22	
Artifacts Jan p5; Mar pp23, 31, 34;	Anr
p32; Jun p22; Sep pp12, 14; Oct p33	rebu
	5
	p14
	p14
Atlatl Sep	p14 p11
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug	p14 p11
Atlatl Sep Avra Valley, Ariz. Nov	p14 p11
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B	p14 p11 p28
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep	p14 p11 p28
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep	p14 p11 p28
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep	p14 p11 p28 p16 p28 p28
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep	p14 p11 p28 p16 p28 p28
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep	p14 p11 p28 p16 p28 p28
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument	p14 p11 p28 p16 p28 p28 p35
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument	p14 p11 p28 p16 p28 p28 p35
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween No	p14 p11 p28 p16 p28 p28 p28 p35
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween No	p14 p11 p28 p16 p28 p28 p28 p35
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5: Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of—	p14 p11 p28 p16 p28 p28 p35 p26 p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5: Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of—	p14 p11 p28 p16 p28 p28 p35 p26 p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Jul	p14 p11 p28 p16 p28 p28 p35 p26 v p4 n p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Jul	p14 p11 p28 p16 p28 p28 p35 p26 v p4 n p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov	p14 p11 p28 p16 p28 p28 p35 p26 p4 p4 p4 p35 p6
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Ju Battye, Charles (Close-ups) Batter, John J. Nov Baxter, Mt., N. M.	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar pridge Nov p32; Ouail Eeb p32; Obilled tern Aug p32; Ouail Eeb p32;	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar pridge Nov p32; Ouail Eeb p32; Obilled tern Aug p32; Ouail Eeb p32;	p14 p11 p28 p16 p28 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4 p22 p35 p10 p28 part-Gull-Dec
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Ju Battye, Charles (Close-ups) Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar J ridge Nov p32; Ducks Nov p34; C billed tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4 p35 p10 p28 part-Gull-Dec
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Ju Battye, Charles (Close-ups) Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar J ridge Nov p32; Ducks Nov p34; C billed tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4 p35 p10 p28 part-Gull-Dec
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Ju Battye, Charles (Close-ups) Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar J ridge Nov p32; Ducks Nov p34; C billed tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4 p35 p10 p28 part-Gull-Dec
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Bennett Wheel. Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar pridge Nov p32; Ducks Nov p34; Cobilled tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Aug	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4 p35 p10 p28 part-Gull-Dec
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5: Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Ju Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar ridge Nov p32; Ducks Nov p34; C billed tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Sug	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4 p35 p10 p28 part-Gull-Dec
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar pridge Nov p32; Ducks Nov p34; Collection of Prey Jan p2; Chukar pridge Nov p32; Ducks Nov p34; Collection of Prey Jan p3; Aug Blythe Weir, Calif. Sep Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Book Reviews— Andrews, Roy Chapman,	p14 p22 p35 p10 p28 part-Gull-Dec p14 p35 p31
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar pridge Nov p32; Ducks Nov p34; Collection of Prey Jan p2; Chukar pridge Nov p32; Ducks Nov p34; Collection of Prey Jan p3; Aug Blythe Weir, Calif. Sep Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Book Reviews— Andrews, Roy Chapman,	p14 p22 p35 p10 p28 part-Gull-Dec p14 p35 p31
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. B Backpacking Sep Badwater, Calif. Sep Badwater, Calif. Sep Baga California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Bennett Wheel. Utah Oct Bennett Wheel. Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar r ridge Nov p32; Ducks Nov p34; C billed tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Book Reviews— Andrews, Roy Chapman, Nature's Ways Jul	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 v p4 p35 v p4 p35 p10 p28 part-Gull-Dec
Attatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Jun Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jun Beal, Mary, Close-ups) Jun Bennett Wheel. Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar pridge Nov p32; Ducks Nov p34; Cobilled tern Aug p32; Quail Feb p32. p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Book Reviews— Andrews, Roy Chapman, Nature's Ways Jul Appleton, LeRoy,	p14 p18 p19 p19 p28 p18 p28 p28 p28 p35 p26 p4 p26 p35 p4 p26 p35 p10 p28 p37 p10 p28 p37 p10 p28 p37 p37 p43 p37 p37 p43 p37 p37 p37 p37 p37 p37 p37 p37 p37 p3
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5: Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2: Chukar Iridge Nov p32; Ducks Nov p34; Cobilled tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Book Reviews— Andrews, Roy Chapman, Nature's Ways Appleton, LeRoy, Indian Art of the Americas Oct	p14 p18 p19 p19 p28 p18 p28 p28 p28 p35 p26 p4 p26 p35 p4 p26 p35 p10 p28 p37 p10 p28 p37 p10 p28 p37 p37 p43 p37 p37 p43 p37 p37 p37 p37 p37 p37 p37 p37 p37 p3
Atlatl Sep Avra Valley, Ariz. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Now Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Ju Battye, Charles (Close-ups) Jul Baxter, John J. Now Baxter Mt., N. Now Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar ridge Nov p32; Ducks Nov p34; C billed tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Sep Book Reviews— Andrews, Roy Chapman, Nature's Ways Jul Appleton, LeRoy, Indian Art of the Americas Oct Arnberger, Leslie P., Flowers of the	p14 p28 p28 p28 p35 p26 v p4 p35 v p4 p22 p35 p10 p28 part-Gull-Dec p14 p35 p31 p43
Atlatl Sep Avra Valley, Ariz. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Now Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Ju Battye, Charles (Close-ups) Jul Baxter, John J. Now Baxter Mt., N. Now Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar ridge Nov p32; Ducks Nov p34; C billed tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Sep Book Reviews— Andrews, Roy Chapman, Nature's Ways Jul Appleton, LeRoy, Indian Art of the Americas Oct Arnberger, Leslie P., Flowers of the	p14 p28 p28 p28 p35 p26 v p4 p35 v p4 p22 p35 p10 p28 part-Gull-Dec p14 p35 p31 p43
Atlatl Sep Avra Valley, Ariz. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Now Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Ju Battye, Charles (Close-ups) Jul Baxter, John J. Now Baxter Mt., N. Now Beal, Mary, Author of— They Like a Rocky Terrain Jul Beal, Mary (Close-ups) Jul Bennett Wheel, Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar ridge Nov p32; Ducks Nov p34; C billed tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Sep Book Reviews— Andrews, Roy Chapman, Nature's Ways Jul Appleton, LeRoy, Indian Art of the Americas Oct Arnberger, Leslie P., Flowers of the	p14 p28 p28 p28 p35 p26 v p4 p35 v p4 p22 p35 p10 p28 part-Gull-Dec p14 p35 p31 p43
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Bennett Wheel. Utah Oct Bennett Wheel. Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar ridge Nov p32; Ducks Nov p34; Cobilled tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Book Reviews— Andrews, Roy Chapman, Nature's Ways Jul Appleton, LeRoy, Indian Art of the Americas Oct Arnberger, Leslie P., Flowers of the Southwest Mountains Aug Arnold, Oren, Savage Son Jan	p14 p28 p16 p28 p28 p28 p28 p28 p28 p28 p35 p26 v p4 p35 v p4 p35 p10 p28 part-Gull-Dec p14 p35 p31 p43 p43 p43
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. Aug B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Jun Battye, Charles (Close-ups) Jun Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jun Beal, Mary, Author of— They Like a Rocky Terrain Jun Bennett Wheel. Utah Oct Bennett Wheel. Utah Oct Bennett Wheel. Calif. Sep Birds—Birds of Prey Jan p2; Chukar pridge Nov p32; Ducks Nov p34; Cobilled tern Aug p32; Quail Feb p32. p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Aug Book Reviews— Andrews, Roy Chapman, Nature's Ways Jul Appleton, LeRoy, Indian Art of the Americas Oct Arnberger, Leslie P., Flowers of the Southwest Mountains Aug Arnold, Oren, Savage Son Jan Thunder in the Southwest Nov.	p14 p28 p16 p28 p28 p28 p28 p28 p28 p28 p35 p26 v p4 p35 v p4 p35 p10 p28 part-Gull-Dec p14 p35 p31 p43 p43 p43
Atlatl Sep Avra Valley, Ariz. Nov Aztec Well, Calif. B Backpacking Sep Badwater, Calif. Sep Baja California Feb p12; Jul p5; Sep Baker, Maggie Sep Bandelier National Monument Jul p33; Sep. Barber, Susan MacSween Nov Battle of Apache Pass, The (movie) Jun Battye, Charles, Author of— Life on the Desert Jul Battye, Charles (Close-ups) Jul Baxter, John J. Nov Baxter Mt., N. M. Nov Beal, Mary, Author of— They Like a Rocky Terrain Jul Bennett Wheel. Utah Oct Bennett Wheel. Utah Oct Bennetts Well, Calif. Sep Birds—Birds of Prey Jan p2; Chukar ridge Nov p32; Ducks Nov p34; Cobilled tern Aug p32; Quail Feb p32, p28; White pelicans Aug p32 Blake, Wm. P. Jun Blanding Tunnel Mar p33; Aug Blythe Weir, Calif. Book Reviews— Andrews, Roy Chapman, Nature's Ways Jul Appleton, LeRoy, Indian Art of the Americas Oct Arnberger, Leslie P., Flowers of the Southwest Mountains Aug Arnold, Oren, Savage Son Jan	p14 p11 p28 p16 p28 p28 p35 p26 v p4 p35 p10 p28 p37 p26 p27 p37 p27 p37 p43 p43 p43 p43 p43 p43

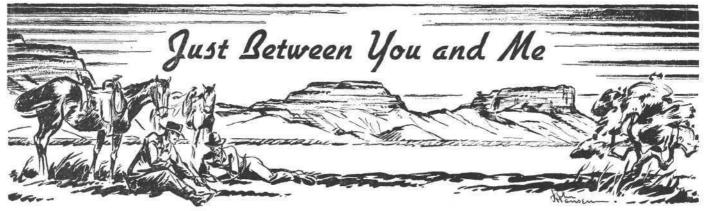
Brandenburg, M. M., and Carl	L. 1	3au-
mann, Observations in Lower (alifo	rnia
TO THE COLUMN	Jun	p43
Burns, Helen, Salton Sea Story	Feb	p43
Burns, Helen, Salton Sea Story Burt, Olive, Jedediah Smith California Division of Mines,	Jan	p45
California Division of Mines, Legal Guide for California Pi		VANOVA SATA
	Dec	10FN
	Dec	b21
Cushman, Dan, The Ripper from Rawhide	Sep	213
Erickson, C. E., Sportsman's Att	las of	the
Colorado River and Lake Mead	Oct	p43
Evans, Dub.		
Slash Ranch Hounds Fenton, Carroll and Mildred, Giants of Geology	Nov	p43
Fenton, Carroll and Mildred,		
Giants of Geology	May	p43
Gillhouse, Mrs. F. A., Pistol Pet	e Oct	p43
Giants of Geology Gillhouse, Mrs. F. A., Pistol Pet Gilmor, Frances and Louisa W therill, Traders to the Navajos	ade	We-
Hallenbeck, Cleve, Land of the Conquistadores Harris, Burton John Colter Heald, Weldon F., Scenic Guide to Nevada Heizer, R. F. and M. A. Whipp	Eab	n 12
Harris Burton John Colter	Dec	p43
Heald Weldon F	1,500	Para
Scenic Guide to Nevada	May	p43
Heizer, R. F. and M. A. Whipr	le.	The same
The California Indians	Jan	p43
Hibben, Frank C.,		200
Treasure in the Dust	May	p43
Hunt, Frazier, Cap Mossman,	(27)	9752
Last of the Great Cowmen	Sep	p43
Hunt, Frazier, Cap Mossman, Last of the Great Cowmen Hurlbut, Cornelius S., Jr., Revi, Dana's Manual of Mineralogy	sed	- 69
Ishimota Totano The Art of	Duite	p+3
Ishimoto, Tatsuo, The Art of and Dried Arrangements	Sen	p43
Jackson Farl		
Tumacacori's Yesterdays Kearney, Thos. and Robt. Peeb Arizona Flora	Jan	p43
Kearney, Thos, and Robt, Peeb	es,	1
Krutch, Joseph Wood, The Desert Year Linsley, Paul J.,	Feb	p43
Krutch, Joseph Wood,		*****
The Desert Year	Jul	p43
Linsley, Paul J.,		
Songs of Shadow and Shining	Aug	p43
McCombe, Leonard,	177	4.2
McCombe, Leonard, Navaho Means People Miller, Joseph, Monument Valle Navajo Country	Apr	p43
Miller, Joseph, Monument Valle	y and	1 Inc
Morhardt, J. E., Death Valley Poems Nininger, H. H., Out of the Sk.	Mar	n43
Nininger H H Out of the Sk	v Iun	n43
Oliver, Harry,	7.1119-100-100-	10000
The Old Mirage Salesman	Jun	p43
Peterson, Roger Tory,		
Wildlife in Color	Apr	p43
Rey, H. A., The Stars		p43
Safley, James C., Mexican Vista:	Nov	p43
Seton, Julia M.,	D	- 42
Indian Creation Stories	Dec	p43
Shankland, Robt., Steve Math National Parks	Mar	nA3
Swanson Wm F	Mai	P45
Camping for All It's Worth	Sen	p43
Swanson, Wm. E., Camping for All It's Worth Turner, Katherine C., Red Me	n Co	illing
on the Great White Father University of New Mexico,	Oct	p43
University of New Mexico,	+(<u>1</u>) (+0) (5) (6)	
New Mexico Artists	Jun	p43
Utah Historical Society.		
Quarterlies	Apr	p43
Ward, Elizabeth, No Dudes, Few Women	Feb	n43
Borax industry		g p5
U.S. Taranta and Aller and	Mar	
Botany (general) Jul p16;		
Botany-Birch tree Jan p13; Ca	ictus	Aug
p 25; Oct p16; California Poppy	Nov	p19:
Cholla Jun p15; Creosote bush	Jul	p31:
Desert dandelions Jun p42; I Nov p23; Desert Savior Jul	esert	lily
tron Inn mal2 12: Florida	p22;	Elm
tree Jan pp12, 13; Flowers, I	· Int	y 01
Greasewood Jul n31: Halocaton	Feb.	p2/:
Jul p16: Fox tail pine May p24 Greasewood Jul p31: Halogeton Mar p33: Aug p34: Sep p32	: Hie	kory
pine Jul p27; Indigo bush Jun p	12; Jo	shua
tree Jan pp9-11, Apr p25; Ju	niper	Feb
p 28, Jun p9. Jul p27; Live-Fe	orever	r Jul

IUEX	DECEMBER, 1952
bee Apr p6; Night p15; Oak tree Jun p p 13; Peach blosse Jul p27, Nov p18; Aug p28; Saguarc (range problem) Oc p22; Sumach tree 1; by Fear" Feb p28; p28, Sep p27; White July p27; Wildflower	Sep p33 Mar p29; Jul p32 Aug p2 uthor of— 4 Nov p13 ose-ups) Nov p26
Camping Campo, Calif, Capitol Reef Nationa	May pp33, 42 Nov p13
Carlsbad Caverns	Feb p23; May p6 Oct p33
Carpenter, Harold	Apr p26
Carrizo Stage Station	
Carson, Kit Caruthers, Wm. (Clos	Apr p8 se-ups) Jan p29
Carv. H. Jackson, At	ithor of—
Recent Emigrants fi	rom Mexico Sep p20 ose-ups) Sep p35
Cary, H. Jackson (Ch.	May p20; Jun p29
Cater, Ruth Cooley,	Author of—
A Pinyon is Born	Nov p18
Cater, Ruth Cooley (Close-ups) Nov p26
Cave Spring, Calif. Cerro Gordo, Calif.	Nov p.22
Chaffee H I (Clove	Sep p35
Chaffin, Art and Del	la
Feb 1	p22; May p4; Oct p8 Feb p22; Sep p34
Chaffin Ferry, Utah	Feb p22; Sep p34
Chinle formation (an	Calif. Jul p4 ology) Apr p7
Chiricahua Mts., Ariz	. Jun p17; Dec p26
Clark Howard	Dec n 8
Clark, H. McDonald	, Author of—
Painter of the Utah	Desert Aug p14 Ariz. Mar p27
Cliff Dwellers Lodge, Cochise	Jun pp4, 24
Calamata Distance	A 20
Colorado River-Jan	p21; Feb pp22, 30;
Mar pp22, 30, 32;	p21; Feb pp22, 30; May pp11, 34; Jun pp31, 34; Oct pp7,
31, 43	pp.51, 54; Oct pp/.
Conlin, Claude A., Jr.,	Author of—
Gems. Minerals and	d Mines Along South-
	3 parts) Sep p40; Oct
p38; Nov p38 Cooking	Mar p8; Sep p27
Coolidge Dam, Ariz.	Jul p20
Copper Canyon, Nev	Aug p30
Coronado National N (proposed)	Oct p29
	60
Courthouse Canyon.	Utah Jun p5
Coville, Dr. Frederick	Calif. Jun p42
Cow Creek, Death Vi	Jul p22 alley Aug p7
Coyote Canyon, Cali	f. May p31
Coyote Dry Lake, Ca	alif. Sep p15
Covote Special the	Alif. Apr p26; Jun p10 Feb p31 Nov pp17, 22
Covote Well, Calif.	Nov pp17, 22
Cathering Transfer and	3100 00
Methuselah of the	Junipers Jun p9
Crompton, Robi. (Cl. Crossing of the Fath	
Crystal Cave Ariz	Oct p39
Crystals(See:	Gems and Minerals) Aug p10
Curry, H. Donald	Aug p10

Customs regulations Jun p32; Nov p30 Cuyamunge ruin, N. M. Aug p35; Oct p33	Garden Gulch, Ariz. Apr p12 Gardner, George, Author of—	H
D	Lost Lead of the Santa Clara Sep p25	Hadji Ali (Hi Jolly) May p22
Dandy Crossing, Utah Feb p23	Gardner, George (Close-ups) Sep p35 Garlic Spring, Calif. Nov p22	Hall, Dick Wick Aug p6 Hall, Judge Ernest Mar p27
Dante's View, Death ValleyAug p4	Garlie Spring, Calif. Nov p22	Hamilton, Ezra Feb p28
Davis Dam, Calif. Jan p32	Garlock, Calif. Mar p6 Gem and Mineral Collecting	Hamilton, Ezra Feb p28 Hanksville, Utah Feb p22
Dead Horse Point, Utah Feb p35 De Anza Jeep Cavalcade	(mapped vs. "secret" fields) Jan p12	Hard Rock Shorty of Death Valley each issue
May p31; Jun p32; Nov p30	Gem polishing Jan p41	Harrington, Dr. John P. Jan n5: May n17
Death Valley, Calif. Mar p24; May p26;	Gems and Minerals: Collecting Areas— Arizona:	Harrison, Steve Jan p21 Hassell, Sandy, Author of—
Death Valley Days Aug p4; Nov p25 Death Valley Days Aug p34	Across river from Needles, Cal. May p11	Hassell, Sandy, Author of—
Death Valley Encampment	Black Canyon, near Phoenix Sep p41	Kayba Sells Her First Rug Jan p25 Kayba Discovers a Strange New
Jan p42; Jul p14; Nov p25	Coolidge Dam Jul p20	World Feb p20
Death Valley 49ers May p10; Jul p14;	Kofa Peak near Quartzite Sep p40 Mammoth Mine at Tiger Oct p38	Hawk Canyon, Ariz. Apr p12
Death Valley Junction, Calif. Aug p5 Aug p9; Sep p31; Nov p25	Mineral Mt. near Superior Nov p38	Hazel Canyon, Calif. Jan p5
Death Valley Museum	St. John Nov p39	Heald, Phyllis W., Author of— Hopi Girl May p16 Heald Weldon F. Author of—
Aug p9; Sep p31; Nov p25	Stanley mining district Apr p10 California:	ricaid, Weldon I., Addition of
Death Valley Scotty Feb p31; Jul p42; Aug p5; Sep p4; Nov. p32	Borrego Badlands west of	Cliff Home of the Ancients Oct p18
Deep Creek Mts., Utah Feb p14	Salton Sea Mar p18	Heald, Weldon & Phyllis May p26; Jun p16 Heber, David N
Demaray, Arthur E. Jan p8	Coyote Mts. Jun p10 Hauser Geode Beds. Aug p28	Heber, David N. Feb p35 Henderson, Bill Jun p22; Sep p16
Denetsosie, Hoke Jul p12	Yuha basin Nov p15	Henderson, Randall, Author of—
De Niza, Fray Marcos Feb p9 Desert Botanical Gardens, Tucson Apr p9	Nevada:	Murray Canyon is a Challenge Jun p19 Tribesmen of Santa Catarina Jul p5
Desert homes Feb p27 Devil's Canyon, Calif. Jun p12; Nov p17	Fossil Leaf Hill near Ione Jan p12	They've Tried to Tame Death Valley
Devil's Canyon, Calif. Jun p12; Nov p17	Sump Hole Dec p4 New Mexico: Todilto Park Apr p6	Aug p4
Devil's Golf Course, Death Valley Aug p6 Devil's Hole, Nev. Apr p28	Utah: Levan ridge Aug pl1	He Built Scotty's Castle Sep p4 Glen Canyon Voyage Oct p7
Diatomite (geology) Jan p17	Gems and Minerals: Specimens—	Lost Silver Ledge of Santa Catarina
Dinnehotso, Ariz. Feb p28	Agate Jan p17, May p12, Jul p20, Aug	Nov p11
Dinosaur National Monument, Utah	p11, Sep p41; Agatized coral Apr p13; Apache tears Nov p38; Catlinite May p39;	Henry Mts., Utah Feb pp23, 25; Aug p30
Mar p12; Sep p34; Oct p34 Diving, deep sea Jan p21	Chalcedony May p12; Chalcopyrite Jul	Hickok, Kenneth E., Author of Troopers' Lost Gold Dec p9
Dodge, Capt. Henry	p41; Colorado River pebbles May p14;	Hickok, Kenneth E. (Close-ups) Dec p14
Dodge, Natt N. Jul p22 Drag-stone mill (mining) Apr p14	Diamonds Jun p27; Fluorescent minerals Jul p37, Nov p40; Fossil leaves Jan p12;	Hidden Passage Canyon, Utah Oct p11
Duchesne Tunnel, Utah Feb p34; May p34	Fossil oyster shells Nov p15; Garnet Apr	Highways, picnic tables along
Dutch Mt., Utah Feb p16	pp6, 10; Jade Nov p35; Jasper May p12;	Highways, trash along Jan p2; Oct p31
Eastgate, Nev. Jan p14	Moss agate May p11; Obsidian nodules Nov p38; Opal Jul p24; Petrified wood	Sep p42; Oct p2; Nov pp21, 22
Eastgate, Nev. Jan p14	Jun p10, Nov p39, Dec p4; Quartz crystals	Agua Caliente to Hwy. 80, Calif. Feb p31
Echo Park Dam, Utah (proposed)	Apr p13, Sep p40; Robinsonite Jan p30;	Black Canyon Hwy: Flagstaff to
Eddy, Charles B. Nov p7 Eichbaum, H. W. Aug pp5, 8	Sandspikes Feb p28, Mar p24, May p24; Sandstone concretions Mar pp18-22, May	Phoenix May p29 Box Canyon Road, Calif. Jul p31
Eichbaum, H. W. Aug pp5, 8	p24, Jun p28, Nov p15; Tourmaline May	Box Canyon Road, Calif. Jul p31
Elephant Butte, N. M. Sep p33 Elephant Rock, Utah Jan p4	p40; Wollastonite Aug p40	Canada to Mexico Hwy Feb p34 Cantu Grade, Baia Calif Jul p5
Ellinger, Edgar, Jr., Author of—	Geology Jan p17; May pp5, 11, 43; Jan p29; Aug p37; Sep p13; Oct p33; Dec p6	Cantu Grade, Baja Calif. Jul p5 Devore to Victorville, Calif. Jan p32
Hoke Denetsosie, Navajo Artist Jul p 12	George, Vivienne L., Author of—	Ensenada to San Felipe, Baja Calif.
Ellinger, Edgar, Jr. (Close-ups) Jul p35 El Muerto Springs, Texas Feb p27	Desert Christmas (First prize, Life	Hanksville to Greenriver, Utah May p4
El Paso and Northeastern RR Nov p7	on the Desert Contest) Jan p27 George, Vivienne L. (Close-ups) Feb p21	Hanksville to Natural Bridges
Escalante, Father Jul p25	Gerke, Margaret (Close-ups) Feb p21	Nat. Mon., Utah Feb p23
Escalante River, Utah Oct p10	Geronimo Jan p2 Ghost towns—Bodie, Calif. Dec p12; Clif-	Imperial Highway, Calif. Jun p10 Las Vegas to Camp Desert Rock, Nev.
F Foirview New Los -14	ton, Utah Feb p16; Courtland, Ariz. May	Jan p34
Fairview, Nev. Jan p14 Fig Tree John Sep p18	p 20; Delamar, Nev. Dec p28; Garlock.	Meteor Crater to Hwy 66Nov p29
Fig Tree John Sep p18 Firearms Feb p28; Mar p5	Cal. Mar p8, Apr p14; Gleeson, Ariz.	San Luis to Sonoyta, Mex. Nov p29 Shiprock, N. M., to Four Corners Feb p27
Fish Creek Mts., Calif Jun p13 Fish—Colorado Minnow Jan p22; Desert	May p20; Gold Hill, Utah Feb p14; Lida, Nevada Jul p32; Stanley, Ariz. Apr p10;	Tijuana to Colorado R., Baja Cal. Jul p5
Pupfish Apr p28; Mullet Feb p30; Trout	White Oaks, N. M. Nov p4	U. S. Highway 6 Jun p33; Nov p32
Jan p22	Giddings, Ada, Author of-	U. S. Highway 54 Jun p34 U. S. Highway 60 Aug p31
Fishing Jan p22; Feb p30; Mar p30;	Goler's Lost Gold Mar p5	U. S. Highway 60-70-99 Sep p32, Dec p27
Fish Lake Valley, Nev. May p31; Oct p31	Gildings, Ada (Close-ups) Mar p43 Gila River, Ariz.	U. S. Highway 70 Jul p20; Aug p32
Oct p32; Nov p31; Dec p4	Jan p31; Mar p27; Jul pp20,29	U. S. Highway 93 Jun p30 Will Rogers Highway Aug p31
Flagg, Arthur L. Jul p21	Gilman, French Aug p8	Yucca cut-off, Ariz. May p12
Flores, Pablo Mar p9 Flowers, history of Jul p16	Gist, Evalyn Slack, Author of—	Hiking Jun p19; Sep p16
Forbidden Canyon, Utah Oct p12	Forgotten Mill of the Joshuas Jan p9 Glen Canyon, Utah Feb p23; Oct p7	Hilton, John, Author of— He Found Dignity in Art May p8
Ford, John Anson Aug p9; Nov p25	Gluck, Harold, Author of—	He Paints Pictures, Too Dec p16
Fort Union, N. M. Sep p34 Fort Yuma Hill, Ariz. Feb p5	Code of Honor in Utah Jan p20	Hilton, John Mar p20; Oct p42; Nov p22
Fossils Jan pp12-17, 37; Mar p40; May	Gluck, Harold (Close-ups) Jan p29	Hinze, R. P. Feb p31
p30; Jul p21; Aug p41; Nov p15; Dec p37	Goblin Valley, Utah May p4 Goldfield News Jan p33	Hinze, R. P. Feb p31 Hite, Cass Oct p8 Hite, Utah Feb p22; Sep p34; Oct p8
Four Corners Feb p27 Franciscan Educational Conference Feb p10	Gold Road, Ariz. May p12	Hole-in-the-Rock Spring, Utah Oct p10
Franciscan priests Jan p19; Feb p5; Jul p31	Goler Heights, Calif. Mar p5	Holloway, Merritt and Nona May p28; Aug p31
Franke, Paul R. May p33 Freeman, Lewis R. Oct p8	Goodwin Pay Jul 22: Aug p5	Homesteading Apr p21; Jul p27; Aug p31;
Frijoles Canyon, N. M. Sep p26	Goodwin, Ray Jul p42; Aug p5 Goulding, Harry and Mike Aug p17	Sep p27; Oct p32; Nov p31
Furnace Creek, Death Valley Aug p5	Grand Canyon Nat. Park Mar p27; Jul p14	Hoover Dam, Nev Jan p21; Mar p31; May p31; Nov p31
G	Grand Gulch, Utah Apr p18	Horse Canyon, Calif. Mar p23; Sep p37
Gallagher, Thomas E. Feb p31	Great Eye, The (N. M.) Apr pp5, 9	Hoskininni Feb p26; Apr p20
Galloping Goose RR Oct p34 Garces, Fr. Francisco Feb p6	Greene, Art. Mar p27; Oct p12 Grey, Zane Dec p17	Hoskininni Rock, Utah Feb p26 Hostetter, Bill Sep p35
onices, 11. 1 falleisco	Sicy, Land	riosiener, bin sep pss

Hunting Jan p36; Apr p42; May p33;	Jones, W. Randle, Author of-	Mexican Hat Expeditions Oct p7
Jun p27; Nov pp28, 34	Black Agate in Milky Wash Aug p11	Milky Wash, Utah Aug pl1
I	Jones, Winifred Randle (Close-ups) Aug p2	Millard, Leatha Feb p15
Invarial Highway Lug p10	Joshua tree paper Jan p9; Mar p23	Mining (News of desert mines) each issue
Imperial Highway Jun p10 Imperial Irrigation Dist, May p30; Jul p32	Jumping beans Feb p28	Mission San Ignacio, Mex. Jan p19
Indians, ceremonials—	K	Mitchell, John D., Author of—
Antelope Dance Dec p23	Kaibab Dam, Ariz. (proposed) Feb p29	Lost Mine With the Iron Door Jul p25 Lost Gold of the Vampire Bats Aug p26
Apache Devil Dance Jun p5	Kaibab National Game Refuge Jul p29	Lost Pima Indian Gold Oct p24
Apache Devil Dance Jun p5 Buffalo Dance Dec p22	Kelley, Reeve Spencer, Author of-	Mitchells Caverns, Calif. Jul p35
Inter-Tribal Indian Ceremonials	Life on the Desert Apr p21	Mittry Lake, Ariz. Feb p29
Aug back cover Navajo wedding ceremony Aug p20	Kelley, Reeve Spencer (Close-ups) Apr p24	Moab Bridge, Utah Apr p33
Indians, Education	Kelly, Charles, Author of—Goblins in	Mohawk Canal, Ariz. May p29
Jul pp33, 34; Aug p35; Oct pp15, 29, 34	Flame-colored Stone May p4	Mojave Desert, Calif. Feb p11; Aug p24; Sep p11
Indians, Employment	Kino, Fr. Eusebio Jan p18; Feb p8 Kit Carson Memorial State Park,	Mojave River Calif Sep n11
Jan p35; Aug p42; Oct p29	N. M. Mar p31; Oct p33	Mojave River, Calif. Sep p11 Moki Canyon, Utah Oct pp10, 11
Indians, Government Apr p33; Oct p13	Koch, Walter H., Author of-	Montezuma, Carlos Jan p43
Indians, Health	Boat Trip on the San Juan Mar p14	Montezuma, Carlos Jan p43 Monument Valley Aug p17; Jun p4
Aug p31; Sep pp29, 33; Oct p33; Nov p29	Koch, Walter H. (Close-ups) Mar p43	Moore, Bill, Author of—
Indians, Legends— Navajo: after-life May p19	Kuhrts, Jack ("Slate Range Jake")	Shack on the Mojave Feb p11 Moore, Bill (Close-ups) Feb p21 Morhardt, Emil Dec p16
Paiute: legend of Singing Mt., Nev.	Mar p8; May p24	Morbardt Emil Dec n16
Jan p14	L	Mormon Pioneer Memorial Bridge, Utah
Indians, Prehistoric Jan p8; Mar p23; Jun	Laguna Hanson, Baja Calif. Jul p7	Mar p33
p22; Aug pp10, 35; Sep pp11, 14, 26;	Lake Cahuilla, Calif. (prehistoric) Mar p18	Moritz, E. A. Sep p33; Nov p31
Oct pp10, 18 Indians, Relations with U. S. Jan pp33, 35;	Lake Esmeralda, Nev. Dec p6	Morongo Valley, Calif. Sep p27
Feb p31; Mar p32; Apr p27; Jun pp33,	Lake Mead Recreational Area, Nev.	Mt. Ord, Ariz. Oct p24 Muench, Josef (Close-ups) May p26
34; Aug p35; Sep p30; Nov pp32, 34;	Feb p32; Aug p34; Oct p32	Muench, Josef (Close-ups) May p26
Dec p25	Lake Mojave, Calif. (prehistoric) Sep p14; Nov p21	Muench, Joyce Rockwood, Author of— They Run the Ferry at Hite Feb p22
Indians, Tribes—	Langmuir, Dr. Irving Jul p33; Aug p35	Hogan Marriage Aug p17
Agua Caliente Jan p31, May p31; Apaches	La Paz, Dr. Lincoln Jan p35	Murbarger, Nell, Author of-
Jan p35, Apr p11, May p20, Jun p4, Jul pp20, 30, Sep p34, Oct p29, Nov p33,	Lapidary—Amateur Gem Cutter,	Treasure Hills of the Utah Desert Feb p14
Dec p25; Cahuilla Mar p18, Dec p27;	by Lelande Quick each issue	Ghost of Baxter Mountain Nov p4
California tribes Jan p43; Chemehuevi	Laudermilk, Jerry, Author of—	Murray Canyon, Calif. Jun p19
Jul p4; Cocopah Jul p9; Colorado River	The Story of Flowers Jul p16 Laudermilk, Jerry Jan p16; Mar p19	Murray, Dr. Welwood Jun p19 Music Hall Canyon, Utah Oct p11 Myrick, Francis Marion "Shady"
Aug p31; Diegueno (Baja Calif.) Jul p9;	Lawbaugh, A. La Vielle, Author of-	Myrick, Francis Marion "Shady"
Hopi Jan p31, Feb p37, Apr p33, May	When Lead Was Mined at the	Jul p31; Aug p24
p 16; Kaliwa (Baja Calif.) Jul p9; Laguna Jan p30; Mojave Apr p30.	Cerro Gordo Mar p9	Mystery Canyon, Utah Oct p11
Aug p31; Navajo Jan pp11, 25; Feb pp8,	When Ancients Dwelt on the Shores	N
20, 34, 35, 37; Mar p31; Apr pp4-9, 33,	of Old Lake Mohave Sep p11 Lederer, Gus May p23; Aug p28	Naco, Ariz. Jun p22; Aug p10 Nailor, Gerald Oct p33
43; May pp17, 29; Jun pp4, 25, 27, 28,	Levan, Utah Aug p11	Nailor, Gerald Oct p33
34, 35; Jul pp12, 33, 34; Aug pp17, 35;	Levan, Utah Aug p11 Lewis Canyon, Ariz. Apr p12 Library of Piman Research Feb p10	National Speleological Society Jul p32
Oct pp13, 22, 29, 33, 42; Nov pp27, 29,	Library of Piman Research Feb p10	Navajo Bridge, Ariz. Jul p30; Oct p5 Nazlini Canyon, Ariz. May p18
34; Pai-Pai (Baja Calif.) Jul p9, Aug p28, Nov p12; Papago Feb p6, Apr p27, Jul	Life on the Desert Contest (prize stories)	Nevills, Norman Mar pp14, 27; Jul p30
pp25, 28, 29; Aug p31, Nov p27; Pima	Jan p27; Feb p11; Mar p14; Apr p21;	Nevills, Norman and Doris
Jan pp18, 31, Feb pp6, 10; Quechan Feb	May p16; Jun p25; Jul p4; Aug p16; Sep p21; Nov p19; Dec p19	Sen n30: Oct nn5 7
p5, Nov p29; Pueblo Dec p22; Santa	Life on the Desert Contest (winners) Jan p8	New River, Calif. Nov p17
Catarina Jul p5, Aug p28, Nov p12; Seri	Litterbugs Sep p42: Oct p2: Nov pp21, 22	Nielson, E. G. Sep p33
(Mexico) Nov p12; Shivwits Sep p28; Shoshone Jan p42, Jul p42, Aug p4;	Lizards (See: Reptiles)	North Wash, Utah Feb p22 Norwegian grinding stones (mining) Jan p14
Ute May pp15, 34; Apr p34, Aug p35,	Loper, Bert Oct pp8, 10	
Nov p34; Yaqui May p9; Yuman Feb p5	Loper, Mrs. Bert Jan p36 Los Cerrillos, N. M. Mar p26; Oet p22	Onk Creat Curves Asia Maria
Indians, Welfare Jan pp33, 35; Feb p31;	Lost Mines—	Oak Creek Canyon, Ariz. May p29 Oatman, Ariz. May p12
Mar pp27, 32; Apr pp27, 33; May pp15,	Lost Escalante Mine, Ariz. Jul p25; Oct p2	Oblasser, Fr. Bonaventura Feb p5; Jul p28
32; Jun pp17, 34; Jul pp30, 33; Aug	Lost Lead of the Santa Clara, Utah	Old Hat Mining district, Ariz.
pp31, 35, 42; Sep p29 International Desert Cavalcade,	Sep p25 Lost Mine with the Iron Door, Ariz.	Apr p35; May p20
Calexico, Calif. Mar p2	Jul p25: Oct p2	Orange Coast Mineral & Lapidary Soc.,
Inter-Tribal Indian Ceremonials, Gallup,	Lost Pima Indian Mine, Ariz. Oct p24	Calif. Aug p28 Organ Pipe Cactus Nat. Mon. Ariz. Jan p31
N.M. Aug back cover lnyo Mountains, Calif. May p24; Jul p27	Lost Shotgun Mine, Calif. Jan p23	Ortega, Nicacio Dec p29 Overland Canyon, Utah Feb p15
Irrigation Trrigation	Lost Silver Ledge of Santa Catarina,	Overland Canyon, Utah Feb p15
Jan p31; Mar pp29, 30; May p29; Aug p31	Baja Calif. Nov p11	Owens Lake, Calif. Mar p9
	Troopers' Lost Gold, Ariz, Dec p9	P
and the second s	Lukachukai Mts., Ariz. Feb p27 Lyman, "Uncle" Walter Mar p33	Pacific Coast Borax Co. Aug p20
Jackrabbit homesteads	00 (Famula)	Pacific Coast Borax Co. Aug p20 Painted Gorge, Calif. Apr p26 Pales Coast Colif
Jul p27; Apr p21; Sep p27 Jackson, Dave Nov p5	M	raim Canyon, Cam. Jun p19: Nov p30
Jackson, Dave Nov po	Malloy, Michael May p8 Manix Dry Lake, Calif. Sep p15	Palmdale, Calif. Apr p25 Palm Springs Desert Museum Jun p32
Jackson, Earl Jan pp19, 43 Jacob Lake, Ariz. Nov p22	Manley Ray I. (Close-ups) Sep p13	Palm Wells, Calif. Sep p27
Jenkins, Powell and Edna, Authors of-	Manley, Ray J. (Close-ups) Marble Canyon, Calif. Sep p35 May p26	Pegleg Smith Gold Trek & Liars
Recovering Gold the Hard Way Apr p14	Marshall, Dr. W. Taylor Mar p13; Apr p9	Contest Feb p33: Oct p16; Dec p18
Jenkins, Powell and Edna (Close-ups) Apr p24	Martinez. Paddy Mar p32 Mastin, M. G., Author of—	Perforated stones
(Close-ups) Apr p24		(archeology) Jan pp5, 7, 8 Phoenix Indian School Jun p17
Jerome, Ariz. Aug p31 Jewell, T. E., Author of—	Deep Sea Diver on the Desert Jan p21 Mastin, Marion G. (Close-ups) Jan p29	Photography (contest winners) Jun p17
Life on the Desert Aug p16	Mather, Stephen T. Mar p43; Aug pp5, 7	Helen Schwartz, Hubert Lowman Jan p4
Jewell, T. E. (Close-ups) Aug p2	McKenney, J. Wilson (Close-ups) Nov p26	Nell Murbarger, D L. De Harport Feb p4
Johnson, Albert M. Aug p5; Sep p4	McNickle, D'Arcy Jun p35 Mecca Easter Pageant Apr p30 Jul p32	R. Van Nostrand, N. N. Kozloff Mar p4
Johnson Rufas D. Author of	Mechani C F	A. De Dienes; D. L. De Harport Apr p23
Life on the Desert Nov p19	Mecham, C. F. Mar p8; May p24 Medicine Man Rock, N. M. Apr p7	Andrew Crofut, Hal Strong May p21 Edward Canby, Norm Moore Jun p23
Johnson, Bessie Sep p4 Johnson, Rufas D., Author of— Life on the Desert Nov p19 Johnson, Rufas D. (Close-ups) Nov p26	Mercur, Utah Sep n34	Richard Randall,
Jones, Tommy May p23; Aug p28	Mercur, Utah Sep p34 Meteorites Jan p35, Dec p33	E. G. Westmorland Jul p23
S 157 S 5	D	Kan and the same of the same o

Mary Otto, Paul E. Black Aug p23	2 20 22 2 22 22	
	Salton Sink, Calif.	Trilobite May pp11, 14
Weldon Heald, Vincent Mandese Sep p23	Mar pp18, 22; Oct p26; Dec p21	Trinity National Monument, N. M. May p32
Robert Leatherman Oct p23	Salt River Project, Ariz. Jun p29	Tucson Mt. Park, Ariz. Feb p29; Apr p27
Arthur Allsop, Norman Moore Nov p23	Salt tablets Mar p23 San Carlos Lake, Ariz. Jul p20	Tumacacori Mission, Ariz. Jan pp18-20, 43
Richard Randall.	San Carlos Reservoir, Ariz. Apr pl1	Twilight Canyon, Utah Oct p11
Brooks Hill Dec back cover	Sand Springs, Nev. Jan p13	U
Photography (covers)—	San Felipe Pueblo, N.M. Dec p22	United Indian Wars Veterans Nov p33
Desert Sunset, Hubert A. Lowman Jan	San Juan River Mar p14; Jul p34; Oct p11	U. S. Geological Survey Jan p30
Navajo Miss, Josef Muench Feb	San Matias Pass, Baja Calif. Jul p10	Utah Field House of Nat. History Oct p34
O 1 1 10 10 1 10	San Miguel, Baja Calif Jul p9	V
Josef Muench Mar	San Pedro Martyr Mts., Baja Calif Jul p10	Vallecito Stage StationJun p10
Desert Colors, Josef Muench Apr	Santa Catarina Mission, Baja Calif.	Valley of Thundering Water, N.M. Apr p4
Tuna, Fruit of the Prickly Pear,	Jul p5; Nov p11	Van Dyke, Judge DixMar p28, Dec p27
Harry Vroman May	Santa Rosa Mts., Calif. Mar p42; Sep p16	Van Valkenburgh, Richard, Author of—
Golden Turret, Josef Muench Jun	San Xavier del Bac, Ariz. Jul p28, May p21	We Found the Lost Indian Cave of the
Oak Creek Canyon, H. A. Lowman Jul	Sartor, E. Louise, Author of—	San Martins Jan p5
Navajo Sheep, Monument Valley,	I Remember Bodie Dec p12	When White Hat Returned to the Land
Jack Breed Aug	Sartor, E. Louise (Close-ups) Dec p14	of the Witch Woman May p17
Uranium Prospector, Ray Manley Sep	Savage-Pinney Party (pioneers) May p26	Van Valkenburgh, Richard (Close-ups)
Storm over Taos Pueblo, Willard Luce Oct Yucca, Sun and Sand, Chuck Abbott Nov	Schmedding, Joseph, Author of—	Virginia City, Nev. May p22; Jul p32
In Navajoland, Rex Fleming Dec	Life on the Desert Jun p25 Schmedding, Joseph Apr p19	Virginia & Truckee RR Jan p33
Picacho del Diablo, Baja Calif Jul p11	Scorpions Feb p29; Mar p28; Apr p27	Virgin River, Utah Sep p25; Oct p2
Pierce C C Nov n13	Scott, Walter (See: Death Valley Scotty)	
Pierce, C. C. Nov p13 Pierson, Lloyd Oct p18	Scotty's Castle, Death Valley Aug p5; Sep p4	W
Pillsbury, Dorothy, Author of—	Searchlight, Nev. Oct p22	Wadsworth, Beula M., Author of—
Tribal Meeting of the Navajo _ Oct p13	Segundo, Thomas Apr p27; Nov p27	Forsaken 80 Years, Mission Still Lives
Christmas Eve in San Felipe Dec p22	Shadow Mt. Gem & Mineral Soc. Rock-	Jan p18
Pino Solo, Baja Calif. Jul p7 Pinto Basin, Calif. Nov p21	hound Fair Feb pp10, 41; Mar pp10, 41;	Wadsworth, Beula M. (Close-ups) Jan p29
Pinto Basin, Calif. Nov p21	Apr. pp37 39	Walker, Ardis MMay p10; Aug p9
Pony express	Sharp, Charles Oct p18	Watchman, John & Flora Apr p4
Jan p13; Feb pp15, 17; Nov p33	Sheep Hole Mts., Calif Jan p23	Watther Mar n28: Anr n22:
Powell, Maj. John Wesley Oct p7	Ship Rock, N. M. Feb p27	Water witching Apr p21 Weather Mar p28; Apr p32; Jun p33; Jul p33; Aug p35
Price, Edna, author of—	Shirley, Charles Keetsie (Close-ups) Jul p35	Weight, Harold O., Author of—
Life on the Desert Dec p19	Show Low Dam Nov p2/, Dec p25	Fossil Leaves from an Ancient
Price, Edna and Bill (Close-ups) Dec p14	Sierra Club of So. Calif.	Nevada Forest Jan p12
Rainmaking Mar p28; Apr p32;	Jan p32; Jun p20; Sep p16	Padre of the Papago Trails Feb p5
Jul p33; Aug p35; Dec pp29, 30 Priest Rock, N. M. Apr p7	Silver Dry Lake, Calif. Sep p11 Simpson, Capt. J. C. Jan p14	Puzzle Rocks of the Badlands Mar p18
Pyramid Lake, Nev. Oct p32	Simpson, Ruth Jun p21	There's Beauty Inside those Ancient Pebbles May p11
Tyramia Bake, Terr	Singing Mt., Nev. Jan p14	
Q	Smith Jedediah Jan p43	Petrified Wood Along the New
Quarries Aug p36; Nov p22	Smith, Moulton B., Author of-	Butterfield Trail Jun p10
Quick, Lelande, Author of—	Smith, Moulton B., Author of— Saguaro Family in Arizona	We Explored an Old Nevada Lake Bed
Amateur Gem Cutter each issue	Smith, Shine Dec p25 Soda Dry Lake, Calif. Sep p14	Weight, Harold O. (Close-ups) Apr p24
a	Soda Dry Lake, Calif. Sep p14	Wellton Ariz Inn pp26, 29
R Babbit Bank Calif	Soledad Canyon, Calif	Wellton, Ariz. Jun pp26, 29
	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26: Jul p29
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society. Mar p30 Southwest Nat. Monument Assoc. Dec p25	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26: Jul p29
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35: Dec pp29, 30	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of—
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena. Calif. Jan p10	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17 Wetherill, Richard Apr p17; Jun p25
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Wetherill, Richard Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14: Oct p10	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paintes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p51 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33;	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17 Wetherill, Richard Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of—
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Wetherill, Richard Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Wetherill, Richard Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Wetherill, Richard Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canvon, Calif. Feb p27	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of—	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock Canyon, Calif. Feb p27 Red Rock Canyon, Calif. Mar p7 Reesee River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28;	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of—
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paintes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shoteun Mine Jan p23
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paintes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shoteun Mine Jan p23
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of— Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of—	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of—
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Jul p42; Aug pp5, 6 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of Garnets Aplenty at Stanley Apr p10	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p2	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of— Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of— In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of— Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p51 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p2 Rockhound Fair, Palm Desert	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Wint, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water On Location with the Navajos Jun p4 Woods, Betty (Close-ups) Jun p24
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p32; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p2 Rockhound Fair, Palm Desert Feb pp10, 41; Mar pp10, 41; Apr pp37, 39	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of— Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods Dor Author of—
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p20, 41; Mar pp10, 41; Apr pp37, 39 Rockhounds Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Jul p42; Aug pp5, 6 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p20, 41; Mar pp10, 41; Apr pp37, 39 Rockhounds Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of Garnets Aplenty at Stanley Apr p29 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4 Tie Canyon, Death Valley Sep p8	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p51 Rainmaking Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p2 Rockhound Fair, Palm Desert Feb pp10, 41; Mar pp10, 41; Apr pp37, 39 Rockhounds. Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40 Rogers, Will Jul p21 Roy, George, Author of—	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4 Tie Canyon, Death Valley Sep p8 Todilto Park, N. M. Apr p7 Tombstone Ariz. In p30	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p27 Rockhound Fair, Palm Desert Feb pp10, 41; Mar pp10, 41; Apr pp37, 39 Rockhounds Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40 Rogers, Will Jul p21 Roy, George, Author of— Cabot Yerxa's Crazy House. Nov p9	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4 Tie Canyon, Death Valley Sep p8 Todilto Park, N. M. Apr p7 Tombstone Ariz. In p30	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Betty (Close-ups) Jun p4 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16 Wright, Frank Oct p7 Wright, Mabel C., Author of— Prisoner of the Paiutes Apr p17
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p32 Reptiles—Gecko lizard Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p10, 41; Apr pp37, 39 Rockhound Fair, Palm Desert Feb pp10, 41; Mar pp10, 41; Apr pp37, 39 Rockhounds Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40 Rogers, Will Jul p21 Roy, George, Author of— Cabot Yerxa's Crazy House Nov p9 Ruth, Nevada Dec p28	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4 Tie Canyon, Death Valley Sep p8 Todilto Park, N. M. Apr p7 Tombstone Ariz. In p30	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Wint, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Betty (Close-ups) Jun p24 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16 Wright, Frank Oct p7 Wright, Mabel C., Author of— Prisoner of the Paiutes Apr p17 Wright, Mabel C. (Close-ups) Apr p24
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p27 Rockhound Fair, Palm Desert Feb pp10, 41; Mar pp10, 41; Apr pp37, 39 Rockhounds Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40 Rogers, Will Jul p21 Roy, George, Author of— Cabot Yerxa's Crazy House. Nov p9	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4 Tie Canyon, Death Valley Sep p8 Todilto Park, N. M. Apr p7 Tombstone, Ariz. Jan p30 Tonopah & Tidewater RR Sep p8 Tonopah Times-Bonanza May p32 Tonto National Monument, Ariz.	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Betty (Close-ups) Jun p4 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16 Wright, Frank Oct p7 Wright, Mabel C., Author of— Prisoner of the Paiutes Apr p17 Wright, Mabel C. (Close-ups) Apr p24
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p10, 41; Apr pp37, 39 Rockhounds Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40 Rogers, Will Jul p21 Roy, George, Author of— Cabot Yerxa's Crazy House Nov p9 Ruth, Nevada Dec p28 Ryan, Death Valley Aug p5	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of— Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of— In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of— Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4 Todilto Park, N. M. Apr p7 Tombstone, Ariz. Jan p30 Tonopah Times-Bonanza May p32 Tonto National Monument, Ariz. Oct p18, Dec p21	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Betty (Close-ups) Jun p4 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16 Wright, Frank Oct p7 Wright, Mabel C., Author of— Prisoner of the Paiutes Apr p17 Wright, Mabel C. (Close-ups) Apr p24
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p10, 41; Apr pp37, 39 Rockhounds Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40 Rogers, Will Jul p21 Roy, George, Author of— Cabot Yerxa's Crazy House Nov p9 Ruth, Nevada Dec p28 Ryan, Death Valley Aug p5	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of— Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of— In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of— Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4 Todilto Park, N. M. Apr p7 Tombstone, Ariz. Jan p30 Tonopah Times-Bonanza May p32 Tonto National Monument, Ariz. Oct p18, Dec p21	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane (Close-ups) Oct p28 Wilhelm, Paul, Author of— Life on the Desert Sep p21 Wilhelm, Paul (Close-ups) Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Betty (Close-ups) Jun p24 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16 Wright, Frank Oct p7 Wright, Mabel C., Author of— Prisoner of the Paiutes Apr p17 Wright, Mabel C. (Close-ups) Apr p24 Yeibichai Rock, N. M. Apr p7 Yerxa, Cabot Feb p31; Nov p9
Rabbit Peak, Calif. Sep p16 Rainbow Bridge, Utah Oct pp7, 11 Rainbow Lodge, Ariz. May p28; Aug p31 Rain-chasing Oct p31 Rain-chasing Mar p28; Apr p32; Jul p33; Aug p35; Dec pp29, 30 Range reseeding May p33 Ravena, Calif. Jan p10 Rawhide, Nev. Oct p32 Ray, Ariz. Sep p41 Reclamation Jan pp31, 32; Feb pp30, 33; Mar p29; May pp29, 33; Jun p29; Aug p31; Oct p34; Nov pp27, 33; Dec p20 Recreation May p33; Sep p16 Red Rock, Ariz. Feb p27 Red Rock Canyon, Calif. Mar p7 Reese River Reveille Jul p23; Rattlesnakes May pp29, 34; Jun p27; Jul p27; Aug p28; Dec p8; Sidewinder rattlesnake May p29; White crested lizard Oct p23 Rincon Mountains, Ariz. Jun p29 Rio Grande River, N. M. Nov p33 Riverside County Fair & National Date Festival Feb p10, 41; Apr pp37, 39 Rockhounds Jan p12; Feb p42, May p41 Rocks, cleaning of Jan p41; Nov p40 Rogers, Will Jul p21 Roy, George, Author of— Cabot Yerxa's Crazy House Nov p9 Ruth, Nevada Dec p28 Ryan, Death Valley Aug p5	Soledad Canyon, Calif. Jan p10 Sonoran Life Zone Society Mar p30 Southwest Nat. Monument Assoc. Dec p25 Speleology Oct pp2, 39 Spider Rock, N. M. Apr p4 Stage Stations & Routes Jan p13; Feb p15 Stahnke, Dr. Herbert Feb p29; Mar p28; Apr p27 Stanley Butte, Ariz. Apr p10 Stanton Grand Canyon Expedition Mar p14; Oct p10 Stanton, Robert Oct p10 Stonemasonry Aug p36 Stove Pipe Well, Death Valley Jul p42; Aug pp5, 6 Sturtevant, Pat, Author of— Death Valley Playmates Oct p17 Sturtevant, Pat & Geo., Authors of— In Memory of a Rockhound Aug p24 Sump Hole, Nev. Dec p4 Swingle, Dr. Walter Apr p29 T Taylor, Fenton, Author of— Garnets Aplenty at Stanley Apr p10 Agate Hunting Along the Gila Jul p20 Taylor, Fenton (Close-ups) Apr p24 Territorial Enterprise Jul p32 Thompson, Matt Roy Sep p4 Todilto Park, N. M. Apr p7 Tombstone, Ariz. Jan p30 Tonopah Times-Bonanza May p32 Tonto National Monument, Ariz. Oct p18, Dec p21	Wellton, Ariz. Jun pp26, 29 Wellton-Mohawk Project, Ariz. Jun p26; Jul p29 Werner, Louise T., Author of— We Climbed Rabbit Peak Sep p16 Wetbacks May p29; Nov p30 Wetherill, Marietta, Author of— Prisoner of the Paiutes Apr p17; Jun p25 White Sands Nat'l Mon., N. M. Sep p34 Wild Horse Butte, Utah May p4 Wiley, W. Deane, Author of— The Salt in Salton Sea Oct p26 Wiley, W. Deane, Author of— Life on the Desert Sep p21 Wilhelm, Paul, Author of— Life on the Desert Sep p35 Wilson, Bill & Katherine May p28; Aug p31 Window Rock, Ariz. Oct p13 Wirt, Gus, Author of— The Lost Shotgun Mine Jan p23 Wirt, Gus (Close-ups) Jan p29 Wirth, Conrad Jan p8; Aug p5 Woods, Betty, Author of— We Explored the Valley of Thundering Water Apr p4 On Location with the Navajos Jun p4 Woods, Dor, Author of— Writer of the Chiricahuas Jun p16 Wright, Frank Oct p7 Wright, Mabel C., Author of— Prisoner of the Paiutes Apr p17 Wright, Mabel C. (Close-ups) Apr p24 Yeibichai Rock, N. M. Apr p7 Yerxa, Cabot Feb p31; Nov p9 Yuma Levee Feb p30
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By RANDALL HENDERSON

WOULD LIKE to join with others in expressing my appreciation to the California State Park Commission for its action in refusing to grant the Navy a bombing concession in the Anza Desert State Park.

The Navy and Marines already have a bombing and gunnery range in Riverside and Imperial counties covering several hundred square miles. I am unwilling to believe that their bombardiers are such bad marksmen they need the whole Colorado desert on which to drop missiles.

When there is war or the threat of war it is expected that the army and navy should have anything and everything they ask for. It is unpatriotic to deny the armed

forces anything they want.

But at the risk of being classified as lacking in patriotism I want to protest against the huge land grabs which the armed forces have put over in the desert country in recent years. Today, a greater area of desert land is posted as reserved for the armed forces and atomic energy commission than at the height of World War II.

As population increases, the need of desert lands for recreational purposes becomes increasingly important. Americans need the outdoors—all they can get of the sky and the forests and the good earth. And in winter when the high mountain areas are snowed in, there is no other playground for southwesterners except on the desert.

Until recently, chambers of commerce have assumed they were getting a fine prize for the home town when, with the aid of their congressmen, they secured an army, navy or air force base for the vicinity. Today, some of them are not so sure these bases and camps are an asset to the community.

Twentynine Palms, California, is a striking example of this. The real estate men wanted a base there—and now they have been promised one: an artillery and anti-aircraft center for the marines estimated to cost \$15,000,000.

Such a military installation as is planned at Twentynine Palms will change completely the character of the community. It may become a better town for those who are interested in quick profits. The 7200 officers and men who are scheduled to be stationed there will spend large sums of money, and their presence will attract many kinds of boom town enterprise.

But in gaining these profits, there is a very great danger that Twentynine Palms will have lost the peace and simplicity and relaxation which have made this desert town and valley increasingly popular with folks who have wished to escape from the noise and traffic and smog of more densely populated areas. In Twentynine Palms are many residents who selected that delightful community with the wide horizons because it was a restful place in which to live—a tranquil little village at the end of the road.

And now these people are uneasy. Some of them already are planning to cash in on the inevitable real estate boom and seek new homes elsewhere.

Tentatively allotted to the new Marine base are 400 square miles of desert terrain including much of the Bullion Mountain area which is said to be highly mineralized. This region is now to be closed to prospectors, as well as to those who come to the desert for recreation.

And so, the new camp at Twentynine Palms is not all

gain

Fortunately, there are still many areas in the desert where you and I still may go to explore or camp or hunt for mineral specimens without trespassing on Uncle Sam's military reservations. And where the displaced persons from Twentynine Palms may find a quiet retreat beyond the sound of artillery practice.

As long as there is the threat of war these military camps and bases are necessary. But the idea that the army, the navy, the marines, the air force and the atomic energy commission each needs its own separate domain for practice purposes doesn't make sense. I can speak with some knowledge of their needs because for more than 30 years I was a member of the air force, either active or reserve.

There was a time when the Great American Desert was regarded as so much wasteland. I guess the top brass in the army and navy and air force still regard it as that.

Actually there are now nearly two million people earning their livelihoods on the so-called arid lands of the Southwest, and probably ten million more who come here for health and recreation every year.

In his book *The Year of Decision: 1846*, Bernard DeVoto wrote: "Remember that the yield of a hard country is a love deeper than a fat and easy land inspires, that throughout the arid West the Americans have found a secret treasure . . ."

I would like to remind the generals and the admirals that we desert folks do think a lot of this arid land of ours—and they cannot keep pushing us off of it without stirring a hornet's nest of protest.

I am glad to report that motorists going to the famous Palm Canyon and Andreas Canyon near Palm Springs will find many improvements this season, designed to make these places more attractive.

Under the direction of Superintendent Lawrence Odle the Agua Caliente Indians have cleared away much of the brush which formerly constituted a fire hazard, have installed new benches and tables, and rebuilt the trails.

For many years the Indians have charged a small toll for entering these scenic canyons. *Desert Magazine* has criticised the tribesmen in past years for not using some of the money to keep the canyons clean and attractive. We are glad to give them credit this year for having done so.

Books of the Southwest

INDIAN CREATION MYTHS RETOLD FOR CHILDREN

"Our little ones are growing up with a knowledge of Greek and Roman mythology, of Norse legends, of Asiatic folklore; but they are completely ignorant of the wealth of beauty and background in their own country," worried Julia M. Seton. Part of the trouble, she felt, lay in the fact that those Indian stories which have been recorded are presented for the student and not for children.

In Indian Creation Stories, Mrs. Seton offers a collection of legends told by the Indians to their children. "The Wise Coyote," "The Race of the Deer and the Antelope," "The Origin of the Bluebird" and "The Buffalo Legend" are but a few of the titles.

The subject matter is as authentic as that presented in more technical Indian anthologies. But Mrs. Seton's versions, in easy-to-understand, charmingly worded prose, are written to appeal especially to children and to give them an understanding of their native American heritage.

Published by House-Warven, 161 pages, line drawings by Marceil Taylor. \$2.95.

EXPLORER JOHN COLTER NO LONGER A LEGEND

John Colter is one of the most picturesque figures in the history of American exploration. In 1807, on foot and alone, he traveled a vast region of the West which no white man had ever trod.

Colter's sober relation of some of the wonders he saw on his journey among them the spouting geysers and boiling mud-springs of Yellowstone National Park—were received by his contemporaries as monumental exercises in yarn-spinning. "Colter's Hell" became a legend and, to a great degree, John Colter himself remains a legend to this day.

Burton Harris has undertaken to rescue the real John Colter, and his book, John Colter, His Years in the Rockies presents an authentic biography of the discoveries and accomplishments. The reality is no less fascinating than the legend—an exciting story of the adventures of a man who helped open the American fron-

Published by Charles Scribner's Sons, 180 pages, index, maps. \$3.50.

NAVAJO LAND OF ROOM ENOUGH AND TIME ENOUGH

Stretching across northern Arizona's high plateau country and into southern Utah lies Monument Valley, a strange and beautiful land where great red sandstone columns and fantastic, weather-carved cliffs reach upward into a turquoise sky. Among the weird natural formations, the domed mud and log hogans of Navajo families dot the desolate expanse.

Joseph Miller went into this "land of room enough and time enough" and took a series of pictures which were published recently in the thin book, Monument Valley and the Navajo Country. Included are cloud-capped landscapes, portraits of individual Navajos and camera studies of Indian life. Of special interest is the photographic record of a Navajo Sing—the tribal ceremony for healing the sick.

The author's introduction offers background information on the country, its people and their customs.

Published by Hastings House. 96 pages, \$3.00.

Books reviewed on this page are available at Desert Crafts Shop, Palm Desert

LORE, LEGEND & LOST MINES OF THE COLORADO DESERT

LOST DESERT GOLD

by Ralph L. Caine \$1.10 postpaid 17162 Foy Sta., Los Angeles, Calif.

Tombstone, Arizona . . .

The Town Too Tough To Die



"Silver stones? Bah! You'll find nawthin' in them hills but yer tombstone," warned the old scout. So when Ed Schieffelin struck ore, he called his claim the Tombstone Mine, and when the news reached the outside world, the town of Tombstone, Arizona, sprang up almost overnight.

The story of Tombstone—"the town drenched in silver and sin," "the town too tough to die"—fascinated Douglas Martin, John Myers and Walter Burns. You, too, will be intrigued by these three authors' fast-moving, action-packed histories. For here, in the bicgraphy of a town, is the authentic spirit of the Old West.

TOMBSTONE'S EPITAPH —by Douglas D. Martin

... from the pages of the **Tombstone Epitaph**, the news as you would have read it had you lived in the '80s ... "Reporting and editorializing at its rich, rare, racy best." ... \$4.50

THE TOMBSTONE STORY -by John Myers Myers

. . . the Earp brothers, Doc Holliday, John Slaughter. Johnny-behind-the-deuce, Curly Bill Brocius, Diamond Annie . . . "A lusty saga of the fighting West." \$1.49

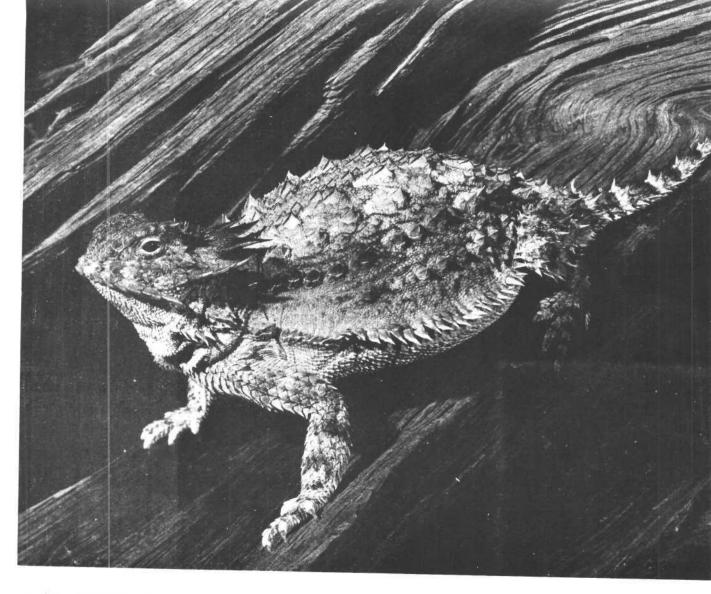
TOMBSTONE —by Walter Noble Burns

... history, intrigue, violence, murder and robbery ... "The true story of gun-toting, cattle-rustling days in old Arizona." ... \$2.50

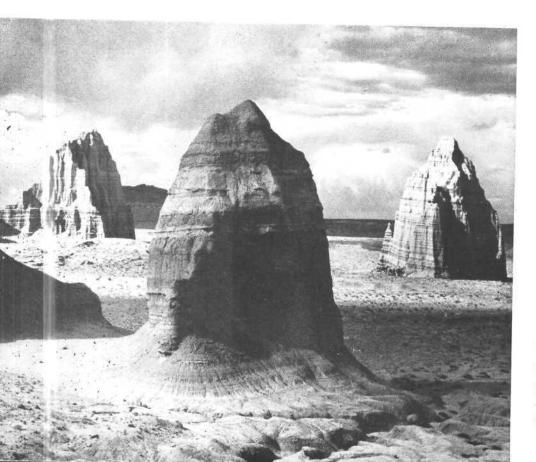
Desert Crafts Shop

Palm Desert, California

California buyers add 3% tax



PICTURES OF THE MONTH



Horned Lizard

Richard Randall of Powell, Wyoming, won first prize in Desert Magazine's October Picture of the Month Contest with this striking study of a horned lizard, commonly called a horned toad. He used a 4x5 Graphic View camera, Super XX film, 1/25 second at f22.

Approaching Storm

A rain squall was coming down from the mountains to the west of Cathedral Valley, behind Capitol Reef, when Brooks Hill of Neosho, Missouri, wandered up a small hill and encountered this breathtaking view. His picture, taken with a Medalist II camera, Super XX film, red filter, 1/100 second at 18, was awarded second prize in Desert's photo contest.